DIVISION OF ENVIRONMENTAL PROTECTION

GASTON CAPERTON
GOVERNOR

1356 Hansford Street
Charleston, WV 25301-1401

LAIDLEY ELI McCOY, Ph.D.
DIRECTOR

September 5, 1995

DELIVERY VIA UPS
RETURN RECEIPT REQUESTED

Mr. Mike Coia
EnviroPower, Inc.
102 Pickering Way
Exton, Pennsylvania 19341-0200

RE: Emergency Permit issued to Chemical Leaman Tank Lines, Institute, WV, EPA ID No: WVR000001719

Dear Mr. Coia:

Enclosed, please find the emergency permit that allows Chemical Leaman Tank Lines to treat contaminated soil in a secure waste pile.

If you should have any questions, please feel free to contact me at the numbers provided on this letter.

Sincerely,

A. S. Talebi

Ahmad S. Talebi, Engineer
Hazardous Waste Management Section
Office of Waste Management

AST:ch
Enclosure

cc: John Humphries, US EPA Region III
G. S. Atwal, OWM Permitting
Mike Dorsey, OWM Compliance
Robert Sattler, OWM Site Investigation & Response
Henry Haas, OWM Inspector

DIVISION OF ENVIRONMENTAL PROTECTION
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GASTON CAPERTON
GOVERNOR

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DIRECTOR

EMERGENCY PERMIT
for
TEMPORARY MANAGEMENT OF HAZARDOUS WASTE

WV Emergency Permit Number: HW0038

Effective Date: 08/28/95

Permittee: Chemical Leaman Tank Lines
Route 25, 1.5 miles W of Exit 50 off I-64
Institute, WV

Expiration Date: 11/25/95

EPA ID No: WVR000001719

Under the authority of Article 18, Chapter 22, West Virginia Code, this emergency permit is issued by the Division of Environmental Protection (DEP), Office of Waste Management (OWM), to Chemical Leaman Tank Lines, hereinafter called the "Permittee", located at Institute, Kanawha County, West Virginia. This permit is issued pursuant to 40 CFR 270.61, adopted by reference into the Hazardous Waste Management Regulations (HWMR) and promulgated under Article 18, Chapter 22, which allows the Permittee to treat contaminated soil, in a secure waste pile in accordance with the approved remedial plan submitted on August 4, 1995. The permittee shall comply with all terms and conditions of this permit. This permit consists of the conditions contained herein (Parts I and II) and the applicable regulations as specified in the permit or which are, by statute, self implementing.

B. F. Smith, P.E.
Chief
Office of Waste Management

August 28, 1995
Date

AST:ch
Enclosures

PART I
STANDARD CONDITIONS

EMERGENCY PERMIT
CHEMICAL LEAMAN TANK LINES

Part I of the permit sets forth the standard conditions that are applicable to all hazardous waste management facilities. The regulations applicable to permitting, Parts 260 through 264, 266, 268, and 270, of Title 40, Code of Federal Regulations, have been incorporated by reference into Sections 2 through 7, 9, 11, and 12, respectively, of the State Legislative Rules, Title 47, Series 35, Hazardous Waste Management Regulations (HWMR).

(NOTE: The regulatory citations in parentheses are incorporated into the permit by reference.)

I-A EFFECT OF PERMIT (40 CFR §§270.4 and 270.30(g))

This permit authorizes the management of hazardous waste expressly described in this permit. It does not authorize any other management of hazardous waste. The Office of Waste Management (OWM) will consider compliance with the terms of this permit to be compliance with the requirements of West Virginia's Hazardous Waste Management Act ("Act), Article 18, Chapter 22 of the WV Code, and the regulations promulgated thereunder.

Compliance with the permit during its term constitutes compliance, for purposes of enforcement, with the Hazardous Waste Management Act (Article 18, Chapter 22 of the West Virginia Code), (hereinafter, the ACT), except for those requirements not included in the permit which become effective by statute, or which are promulgated under 40 CFR, Part 268, restricting the placement of hazardous waste in, or on, the land. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local law or regulations. Compliance with the terms of this permit does not constitute a defense to any order issued or any action brought by the U. S. Environmental Protection Agency (US EPA) under Sections 3008(a), 3008(h), 3013, or 7003 of RCRA; Sections 104, 106(a), or 107, of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (42 U.S.C. §9601 et. seq., commonly known as CERCLA); or any other law providing for protection of public health or the environment.

I-B PERMIT ACTIONS (40 CFR §270.30(f))

Pursuant to 40 CFR 270.43, the Chief may terminate this permit at any time without prior notice if the Chief determines that termination is appropriate to protect human health and/or the environment.

I-C SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit, or if the application of any provision of this permit, to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

I-D DEFINITIONS

For the purpose of this Permit, terms used herein shall have the same meaning as those set forth in the Hazardous Waste Management Regulations (47 CSR 35), Hazardous Waste Management Act (22-18), and 40 CFR, Parts 260 through 264, 266, 268, 270, and 279, which have been incorporated by reference, unless this permit specifically states otherwise. Where terms are not otherwise defined, the meaning associated with such terms shall be as defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term. The following definitions also apply to this permit.

D-1 Chief means the Chief of the Office of Waste Management, Division of Environmental Protection;

D-2 Days mean except as otherwise provided herein, calendar days;

D-3 Hazardous Constituent means any constituent identified in Appendix VIII of 40 CFR, Part 261, or any constituent identified in Appendix IX of 40 CFR, Part 264;

D-4 Release means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment.

I-E FAILURE TO SUBMIT RELEVANT AND/OR ACCURATE INFORMATION

Whenever the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Chief, OWM, the Permittee shall notify the Chief of such failure within seven (7) calendar days of becoming aware of such deficiency or inaccuracy. The Permittee shall submit the correct or additional information to the Chief within fourteen (14) days of becoming aware of the deficiency or inaccuracy (40 CFR, §270.30(l)(11)). Failure to submit the information required in this permit or misrepresentation of any submitted information is grounds for termination of this permit (40 CFR, §270.43).

I-F DUTIES AND REQUIREMENTS

F-1 Duty to Comply (40 CFR §270.30(a))

The Permittee must comply with all conditions of this permit. Any noncompliance constitutes a violation of the Act and is grounds for enforcement and/or permit termination.

F-2 Permit Expiration (40 CFR §§270.61(b)(2)

This permit and all conditions herein shall be effective for a fixed term not to exceed ninety (90) days.

F-3 Need to Halt or Reduce Activity Not a Defense (40 CFR §270.30(c))

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

F-4 Duty to Mitigate (40 CFR §270.30(d))

In the event of releases or noncompliance with the permit, the Permittee shall take all reasonable steps to minimize releases to the environment and shall carry out such measures as are reasonable to prevent significant adverse impact on human health or the environment.

F-5 Proper Operation and Maintenance (40 CFR §270.30(e))

The Permittee shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality control/quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

F-6 Inspection and Entry (40 CFR §270.30(l))

The Permittee shall allow the Chief, OWM, or an authorized representative, upon the presentation of credentials and other documents as may be required by law to:

a. Enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

d. Sample or monitor, at reasonable times, for the purposes of assuring permit compliance, or as otherwise authorized by the Act, any substances or parameters at any location.

F-7 Duty to Provide Information (40 CFR §§270.30(h))

The Permittee shall furnish to the Chief, OWM, within a reasonable time designated by the Chief, any relevant information which the Chief, may request to determine compliance with this permit. The Permittee shall also furnish to the Chief, OWM, upon request, copies of records required to be kept by this permit.

F-8 Anticipated Noncompliance (40 CFR §270.30(l)(2))

The Permittee shall give advance notice to the Chief, OWM, of any planned changes in the permitted facility, or activity, which may result in noncompliance with permit requirements. Such notice does not constitute a waiver of the Permittee's duty to comply with permit requirements.

F-9 Monitoring and Records (40 CFR 270.30(j)

(a) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. The method used to obtain a representative sample of the waste to be analyzed must be an appropriate method from Appendix I of the HWMR. Laboratory methods must be those specified in Test Methods for Evaluating Solid Waste: Physical/Chemical(s) Methods (SW-846, 3rd Edition).

(b) The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, the certification required by 40 CFR §264.73(b)(9), and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report, certification, or application. This period may be extended, by request of the Chief, at any time.

© Record of monitoring information shall include:

1) The date, exact place, and time of sampling or measurement;
2) Name of individuals who performed the sampling or measurement;
3) Dates analyses were performed;
4) Names of individuals who performed the analyses:
5) Analytical method used; and
6) Results of such analyses.

F-10 Twenty-four (24) hour Reporting (40 CFR §§270.30(l)(6) and 270.33)

The Permittee shall report to the Chief, OWM, any noncompliance which may endanger human health or the environment. Any such information shall be reported orally as soon as possible, but no later than twenty-four (24) hours from the time the Permittee becomes aware of the circumstances.

This report shall include the following:

a. Information concerning the release of any hazardous waste which may endanger public drinking water supplies; and

b. Information concerning the release or discharge of any hazardous waste, or of a fire or explosion at the facility, which could threaten the environment or human health outside the facility. The description of the occurrence and its cause shall include:

(1) Name, address, and telephone number of the owner or operator;

(2) Name, address, and telephone number of the facility;
(3) Date, time, and type of incident;
(4) Name and quantity of material(s) involved;
(5) The extent of injuries, if any;
(6) An assessment of actual or potential hazard(s) to the environment and human health outside the facility, where this is applicable, and;
(7) Estimated quantity and disposition of recovered material that resulted from the incident.

A written submission shall also be provided to the Chief, OWM, within five (5) days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period(s) of noncompliance (including exact dates and times); steps taken to minimize impact on the environment; whether the noncompliance has been corrected, and if not, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate and prevent recurrence of the noncompliance. The Permittee need not comply with the five (5) day written notice requirement if the Chief, OWM, waives the requirement. Upon waiver of the five (5) day requirement, the Permittee shall submit a written report within fifteen (15) days of the time the Permittee becomes aware of the circumstances.

F-11 Other Noncompliance (40 CFR §270.30(l)(10))

The Permittee shall report all other instances of noncompliance not otherwise required to be reported above within fifteen (15) days of when the Permittee becomes aware of the noncompliance. The reports shall contain the information listed in Condition I-F-10.

F-12 Submittal of Reports or Other Information (40 CFR §§270.30(l)(7), (8), (9), and 270.31)

All reports or other information required to be submitted pursuant to this permit shall be sent to:

Chief, Office of Waste Management
1356 Hansford Street
Charleston, WV 25301
ATTN: Hazardous Waste Management Section

I-G SIGNATORY REQUIREMENT

G-1 All reports or other information submitted to or requested by the Chief, OWM, his designee, or authorized representative, shall be signed and certified in accordance with 40 CFR §270.11.

G-2 Changes to Authorization. If an authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, or because a new individual or position has responsibility for the facility's compliance with environmental laws and permits, a new authorization satisfying the requirements shall be submitted to the Chief prior to or together with any

reports, information, or applications to be signed by an authorized representative (40 CFR §270.11(c)).

I-H SECURITY (40 CFR 264.14)

Compliance with 40 CFR 264.14 must be achieved by preventing the unauthorized entry, and minimizing the possibility for the unauthorized re-entry of persons onto the active portion of this facility at any time when wastes are present.

I-I REPORTING

Within fifteen (15) days of permit expiration or termination, a complete Hazardous Waste Activity Report (Attachment A) must be submitted to the Chief, OWM.

PART II
SPECIFIC CONDITIONS

Emergency Permit
Chemical Leaman Tank Lines

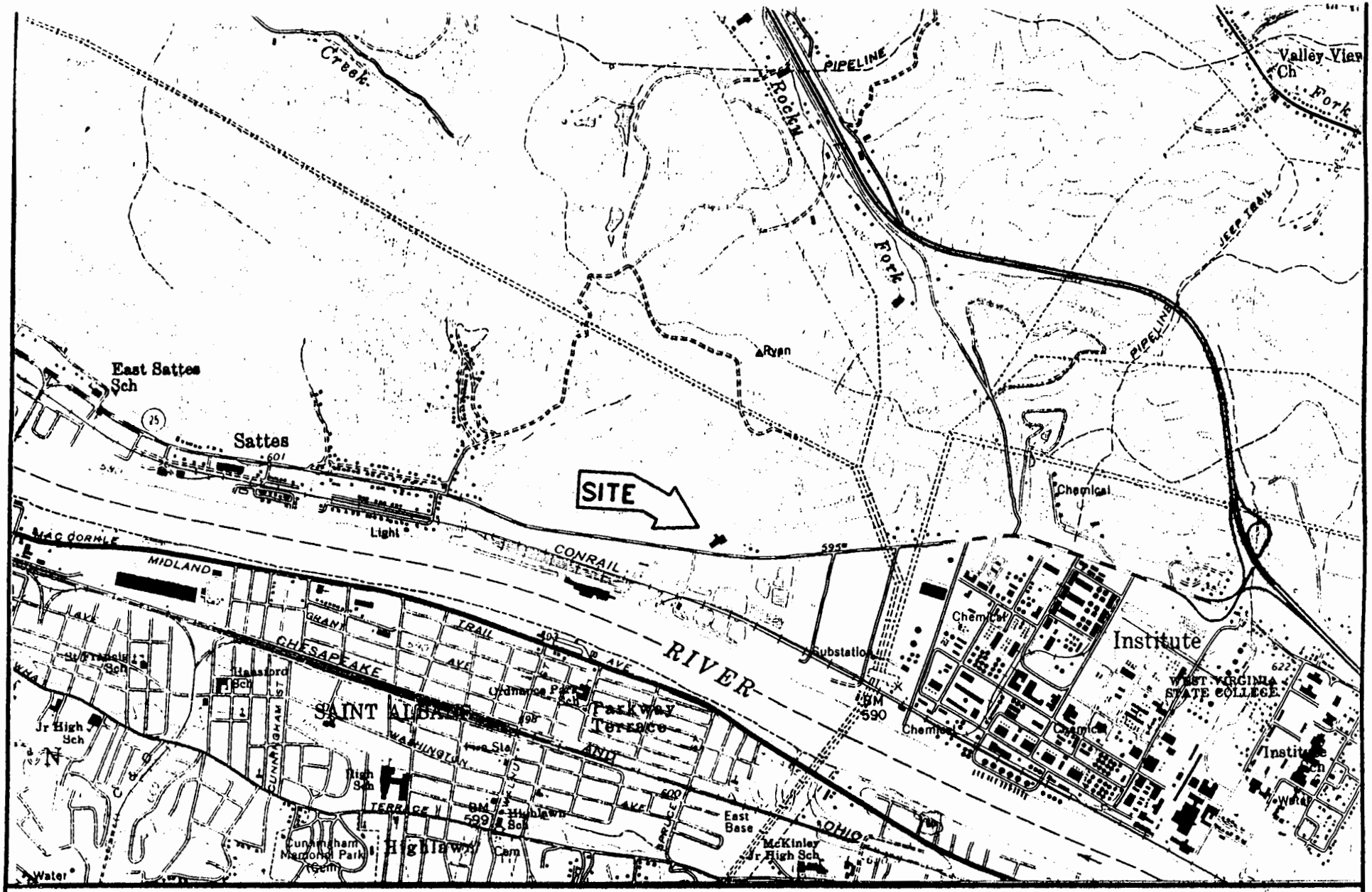
A. FACILITY DESCRIPTION:

This site is a tanker truck dispatching, washing, and maintenance facility currently owned and operated by Chemical Leaman and is located on West Virginia State Route 25 within an industrial region consisting primarily of chemical producers near Institute, WV, approximately fifteen (15) miles northwest of Charleston, WV. Figure 1 is the Site Location Map for this facility.

According to the USGS, St. Albans, WV quadrange map and prior site investigations, the localized surface runoff appears to flow across the site towards the south southwest into a drainage swale on the north side of WV State Route 25. This runoff continues through a culvert under Route 25 into an unnamed tributary for a short distance to the Kanawha River. There is a tanker washing facility operating at the site which incorporates an industrial wastewater treatment system and discharges treated effluent under an existing WVDEP National Pollution Discharge Elimination System (NPDES) Permit.

The first of the two (2) areas of concern is the "Disposal Pit Area" located along the dirt access road to the upper area of the facility's wastewater treatment plant. A localized hot spot was delineated adjacent to the northern most neutralization tank as defined by Organic Volatile Analyzer (OVA) concentrations in excess of 1000 PPM. Further definition of this area was performed by the installation of two (2) soil test borings and three (3) groundwater piezometers. Subsequent soil sampling and respective analytical results indicated that TCLP Priority Pollutant results were nondetect or below regulatory levels of concern. After discussions with the WVDEP, further site characterization, via backhoe test pits, will be performed around the area of potential concern in order to confirm no required remediation.

The second area of concern is the "Drum Burial Area". A subsurface investigation of the "Drum Burial Area" involved an initial MACRO and MICRO electromagnetic (EM) survey for identification of potential burial areas. The EM survey resulted in the identification of eight (8) potential drum disposal locations. Seven (7) drums of unknown contents were located within four (4) of eleven (11) excavation test pits. The location of the test pit excavations and discovered drums are symbolized in Figure 2. Two (2) drums of unknown content were identified by respective insignias or markings as "Union Carbide" and "Monsanto". The remainder had no identifiable markings or generation source reference.



VECTOR ENTERPRISES INC. 1050 COOPER ROAD GRAYSON, GA. 30221 (404) 979-6666

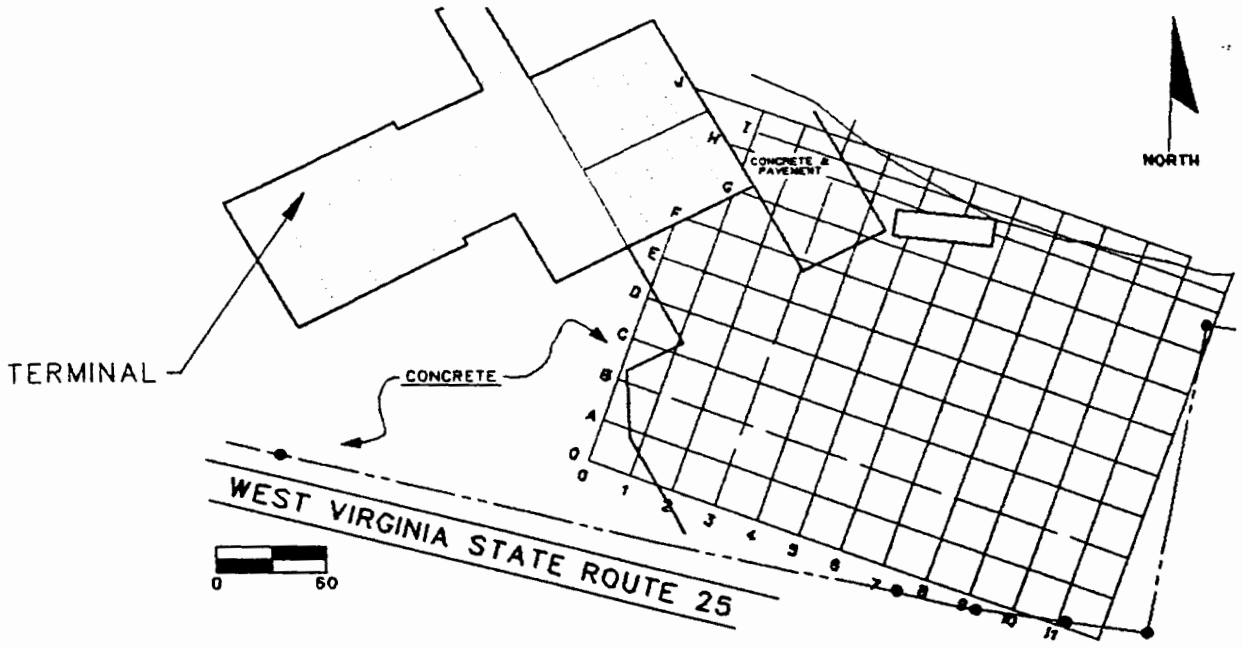
0 2000'

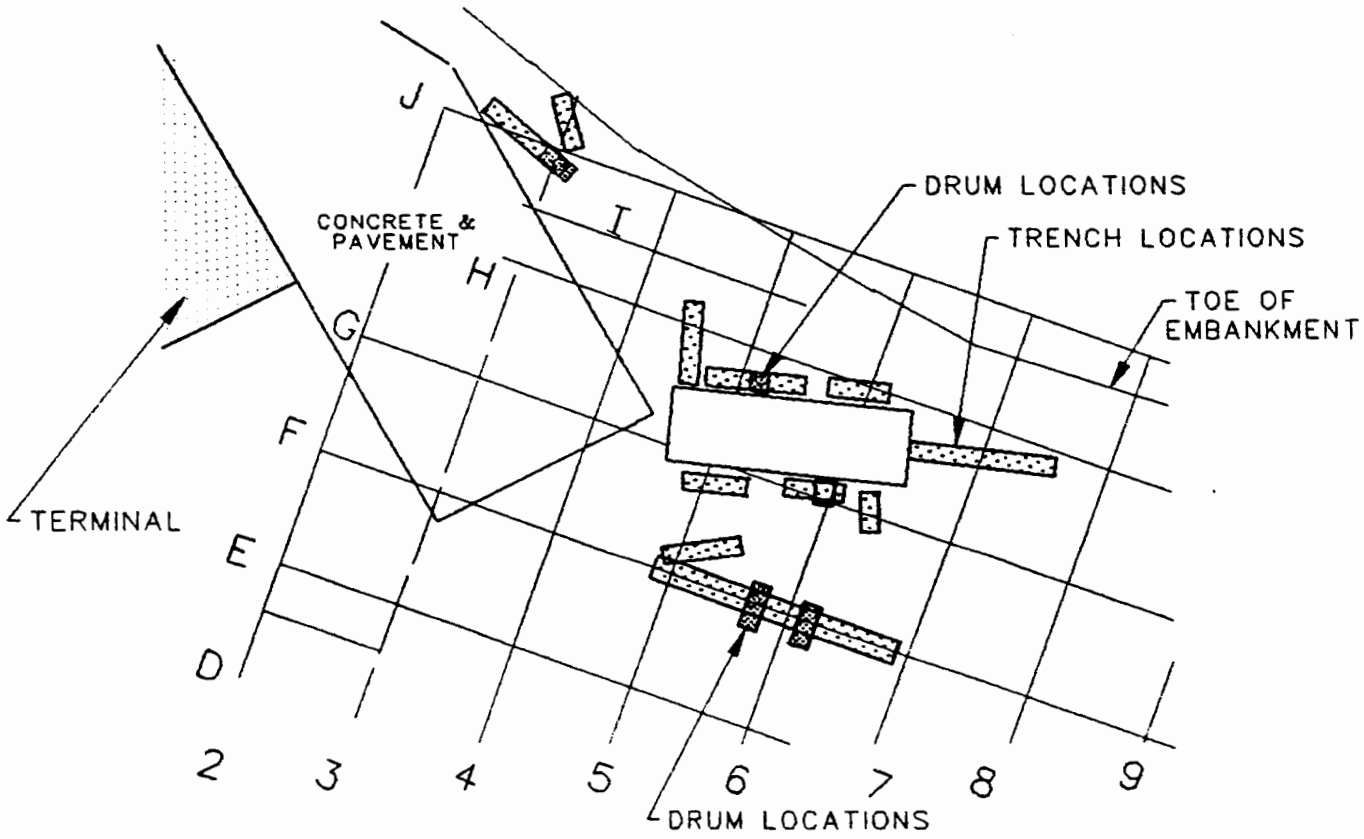
DWG NAME: CLO

LOCATION PLAN

FIGURE 1

CHEMICAL LEAMAN
CHARLESTON, WVA.





VECTOR ENTERPRISES INC. 1050 COOPER ROAD GRAYSON, GA. 30221 (404) 979-6666

0 40

DWG NAME: CL8

EXISTING CONDITIONS MAP

FIGURE 2

CHEMICAL LEAMAN
CHARLESTON, WV

According to the Permittee, the drum disposal areas identified were determined to be isolated areas rather than a single continuous disposal area with all identified drums located randomly and placed without consistent orientation. While the previous investigations confirmed the presence of buried drums at the site, no definitive estimate of the quantity of drums could be made without fully excavating the disposal areas.

Residual soil conditions south of the existing drum storage facility were noted as being fine sands and clays with moderate to low moisture content. Bedrock was encountered at depths ranging from 4.5 to 6.0 feet below ground level. Standing water and/or areal ponding has created saturated conditions within several of the drum disposal excavation pits located northeast of the drum storage facility. Several of these excavation pits contain layers of various debris and general trash.

B. DESCRIPTION OF WASTE:

1) Disposal Pit Area: A localized hot spot was delineated adjacent to the northern most neutralization tank as defined by OVA concentrations in excess of 1000 PPM. Further definition of this area was performed by the installation of two (2) soil test borings and three (3) groundwater piezometers. Subsequent soil sampling and respective analytical results indicated that TCLP Priority Pollutant results were nondetect or below regulatory levels of concern.

2) Drum Burial Area: The subsurface investigation of the "Drum Burial Area" involved an initial MACRO and MICRO EM survey for identification of potential burial areas. This EM survey resulted in the identification of eight (8) potential drum disposal locations. Seven (7) drums of unknown contents were located within four (4) of eleven (11) excavation test pits. The location of the test pit excavations and discovered drums are symbolized in Figure 2. Two (2) drums of unknown content were identified by respective insignias or markings as "Union Carbide" and "Monsanto". The remainder had no identifiable markings or generation source reference.

C. PREPAREDNESS AND PREVENTION:

In general, the scope of remedial activities is limited to the removal of the contaminant source materials as identified during the Phase I Site Characterization Investigation completed in January, 1995. Additional subsurface investigation will focus on areas identified as possible hot spots during the Phase I investigation. The scope of remedial activities may be adjusted based upon discovered conditions observed during the additional site characterization. The following tasks will be completed under this voluntary remedial action:

DEMOLITION OF EXISTING DRUM STORAGE FACILITY: The existing drum storage facility will be demolished to facilitate the removal of any encountered drums or contaminated soils beneath the concrete slab. The existing drum storage pad created interference with the Phase I EM survey due to the metal content of the structure and by restricting direct access for trenching. The entire structure will be removed and if any drums or contaminated soils are encountered, they will also be removed. A new drum storage area has been constructed at the tanker washing facility for future storage of drums on site.

CONTAMINATED SOIL REMOVAL: During the Phase I Site Characterization Investigation, an area was delineated as having a high probability of containing contaminated soil and buried drums. The scope of this task is to excavate the soil within this designated area, perform field screening analysis, and prepare the soil for on site bioremediation treatment. The boundaries of the delineated area may be adjusted based upon observed conditions. After the collection of post excavation samples, the excavations will be backfilled utilizing clean material obtained from the site. This area will be restored for utilization by facility operations.

DRUM REMOVAL AND DISPOSAL: All drums and containers discovered during the previous site Characterization Investigation and during the soil excavation activities will be extracted from the excavation. During the Site Characterization Investigation, seven (7) buried drums were located randomly scattered throughout the delineated drum disposal area. According to the Permittee, the potential for a maximum total of thirty (30) drums is estimated. The unearthed drums will be completely inspected and documented as to location, orientation, condition of surrounding soils, identifying markings, and integrity. The drums will be immediately placed on a lined staging area. The recovered drums and containers may be placed in overpack drums depending on the condition of the original containers. Once staged, the drums will be opened, characterized, and sampled, as described in Section 2.5.4 of the attached Work Plan (Attachment B). The characterization of these materials will include a proper hazardous waste determination and subsequent proper management of these wastes in accordance with 40 CFR, Parts 260-279. The obtained samples will be field screened for compatibility for bulking and disposal profiling.

D. TREATMENT PERFORMANCE:

Soil Staging and Bioremediation: One thousand eight-hundred-fifty (1850) cubic yards of soil may have been affected by the disposal of drums and wastes within the "drum burial" area. The area of proposed excavation for soil and drum removal was based on the existing grid and coordinate system developed during the Preliminary Site Characterization Investigation. A newly established numbered excavation grid system will be utilized for soil and drum removal.

1) Soil Staging: Removal of contaminated soil and drums will be performed from within one (1) grid area or excavation zone (1 through 8) at a time, starting with Grid 1, and continuing removal through Grid 8. Each grid is approximately 25 x 25 feet in width and length with a depth averaging 5.5 feet, depending on the depth of bedrock. This procedure will minimize exposure of multiple buried drums and contaminated soils over a large area lowering the potential for safety hazards.

   As discussed in Section 2.3 of the Work Plan (Attachment B) (Attachment B), removal of soil will be performed with caution to minimize the potential for drum rupture. Excavated soils will be placed on 20 mil visqueen outside of the grid area. These soils will be immediately transported to a designated biocell for treatment after visual segregation and field analysis. Soil removal from each grid area will be transported by front-end loader to a separate biocell, respective to the grid excavation number and/or obvious contamination.

After excavation and drum removal is complete, within the respective grid area, each excavated area will be lined prior to backfilling to minimize contact or mixing of clean backfill material and residual contaminated soils. Each respective grid area will be backfilled and compacted to original grade prior to commencement of excavation within other grid areas. According to a topographical map generated by Triad Engineering, a two (2) to three (3) foot cut will be required along the toe to the existing northern cut bank in the biocell preparation area. This graded material will be stockpiled for use as backfill material in the proposed excavated areas. This soil will be sampled and analyzed prior to placement to meet LDR minimum requirements.

2) General Bioremediation Activities: The contractor, VECTOR, will incorporate bioremediation to remove the petroleum based organic contaminants from the soils associated with the buried drums and waste pit areas to be excavated at the Chemical Léaman Tank Line facility. The main advantage of the bio-treatment is that is has a relatively low capital/maintenance cost, moderate remedial time and no transportation fees. VECTOR will utilize an enzyme augmented bioprocess to accelerate the treatment schedule. This process has been proved to reduce TPH contamination in soils from 7,000 mg/kg to below 10 mg/kg within 4-5 weeks.

3) Biocell Construction: VECTOR proposes to utilize the undeveloped portion of the site located to the east of the office and garage facility to install a series of single-level biopiles ("BIOCELLS"). The BIOCELLS will be constructed after clearing and grading during the site preparation stage. This area will be utilized to create a "ground silo" type biopile approximately 30 feet by 100 feet and 3 feet in depth.

A group of six (6) BIOCELLS will be placed as illustrated in Figure 11. The base of each biocell will be graded at a 1% slope to facilitate excess water drainage toward a collection sump. A one (1) foot high soil berm will be created around the perimeter of each cell for lateral support and diking of exterior surface runoff during periods of excess precipitation.

A 4" layer of coarse sand will be placed above the base of the graded slope to allow placement of a base liner. The sand covered base and berms will be covered with a 12 mil reinforced triple coated nylon liner. The liner will be anchored around the perimeter of the cell by the placement of hay bales and additional sand above the soil berms. Two (2) additional liners will be installed along the length of the BIOCELLs which overlap a portion of the base liner and the bermed walls with excess for total capping of the BIOCELL when contaminated material has been placed.

An additional 4 to 6 inches of coarse sand will be placed over the base liner for drainage of nutrient fluids if base saturation occurs. A geotextile filter fabric will be placed above the sand to disallow finer soils to migrate into the sand layer. A series of perforated 3/4 inch diameter PVC air supply piping will be placed on approximately six (6) foot centers along the length of the BIOCELL base above the geotextile mat. (See Aerobic BIOCELL Construction Diagram-Figure 11, for construction and cell placement.)

The contaminated soil will be placed in three (3) - one (1) foot lifts in each BIOCELL. VECTOR personnel will pretreat the contaminated soil by blending it

with sawdust or hay (pending availability) at a mix ratio of <10% to soil. Nutrients and enzyme solutions will be mixed into the soils as they are placed in the cell. Additional nutrients and/or enzymes will be applied to the cell as required throughout the treatment period. Air will be injected into the pile on a continuous basis via a seven (7) hp positive displacement blower connected through a header system to the air feed pipe network.

The BIOCELLs will be constructed to extend approximately 2-3 feet above ground level in order to achieve adequate rainwater runoff during treatment. The dark colored (black) liner cover will be placed to ensure that maximum heat is retained and rainwater will be prevented from entering the cell by sloping the cover toward the natural southerly sloping topography.

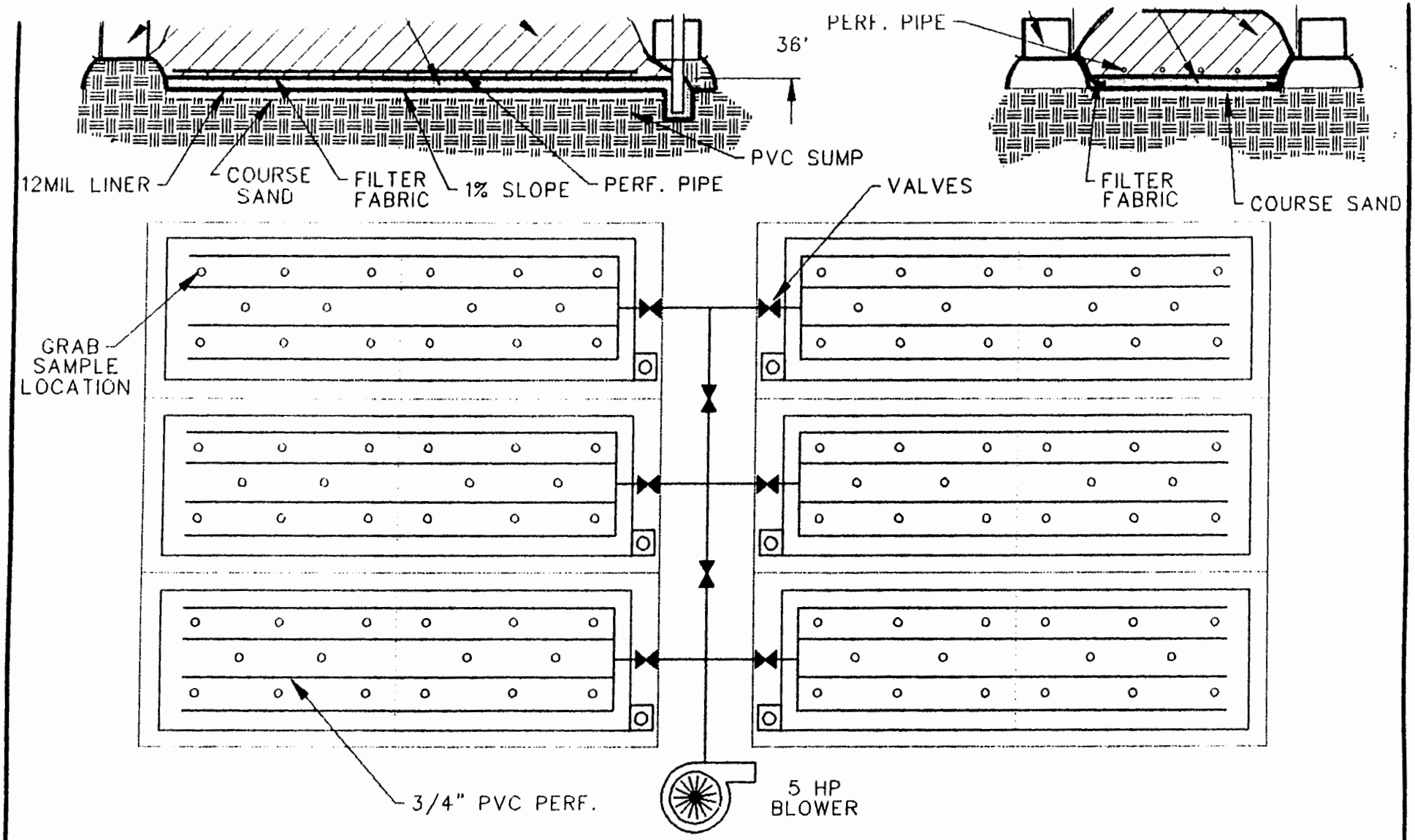
4) BIOCELL Operations: Operations of the BIOCELLS will be initiated simultaneously during the final drum removals and characterizations. The general operations of the BIOCELL involve the weekly application of the nutrient exzymatic materials and monitoring of the constant supply of air via a piping manifold system and flower unit. Application of the nutrients involve the following weekly tasks:

   a) Shut off air supply to BIOCELL to be treated
   b) Remove the liner cover
   c) Sample soils when applicable as described in Section 2.6.5 of Work Plan (Attachment B)
   d) Spray application of one gallon of nutrient blend per one (1) cubic yard of contaminated soil
   e) Disc soils for blending of nutrients and soil to base depth
   f) Replace liner capping
   g) Re-establish air supply to BIOCELL
   h) Repeat steps 1 through 6 for additional BIOCELLS

5) Bioremediation Sampling and Analysis Plan: The general proposed bioremedial sampling and analysis of BIOCELL is based on a series of composite samples being analyzed for total VOC and SVOC concentrations as screening analyses. Once bioremediation screening analyses indicate treatment is complete, final full VOC (Method 8260) and SVOC (Method 8270) analysis will be performed on the composite samples to correlate actual compounds to respective LDR concentrations prior to BIOCELL closure.

   a) Sample Selection and Recovery: As described in Section 2.6.3 of the Work Plan (Attachment B) (Attachment B), each BIOCELL will be approximately thirty (30) feet in width, one hundred (100) feet in length and approximately three (3) feet in depth (approximately 330 cy). Two (2) composite samples will be generated from each BIOCELL for verification of remedial efforts. Each composite sample will be developed from the blending of eight (8) grab samples recovered from eight (8) designated locations within the eastern and western halves of each BIOCELL. See Figure 11 for grab sample locations. The samples will be recovered on approximately a weekly basis prior to nutrient application and soil blending operations in the following manner;

      1) Beginning with BIOCELL #1, disengage air flow valve to respective cell.
      2) Remove liner cover taking care not to tear or puncture material.



VECTOR ENTERPRISES INC. 1050 COOPER ROAD GRAYSON, GA. 30221 (404) 979-6666

DWG NAME: CL17	AEROBIC BIOCELL CONSTRUCTION DIAGRAM FIGURE 11	CHEMICAL LEAMAN CHARLSTON, WVA.

3) Utilizing a decontaminated stainless steel hand auger, remove and obtain a representative soil sample from each one (1) foot depth and place into a one (1) gallon "zip lock" plastic bag blending thoroughly.
4) Place granulated or chipped bentonite into the annulus space of bore hole created by the auger.
5) Hydrate bentonite utilizing potable water.
6) Repeat steps 3 through 5 for each location, eight (8) within each half of the respective BIOCELL.
7) Utilizing a decontaminated stainless steel tray, blend the eight (8) grab samples to create one (1) - eight (8) ounce composite sample for each half of the respective BIOCELL labeling each composite sample with the current date, time, and locations (ie: BIOCELL 1E, for the eastern half composite sample and/or BIOCELL 1W, for the western half composite sample).
8) Replace all excess grab sample soils into the respective half of the BIOCELL being sampled.
9) Replace and secure liner capping.
10) Repeat steps 1 through 9 for all six (6) BIOCELLS. A total of twelve (12) composite samples should be generated utilizing these procedures.
11) Place all composite samples in a field laboratory refrigeration unit for storage prior to sampling.

b) Sample Analysis: A total VOC and SVOC screening analysis will be performed on each composite sample until the bioremediation is complete for the BIOCELL. As individual BIOCELL composite samples are recorded at or below the target concentration, a full laboratory analysis of VOCs and SVOCs will be performed for the respective composite sample.

All analytical methods used shall be in accordance with EPA SW-846; Test Methods for Evaluating Solid Waste, 3rd Edition. The following GC/MS analytical methods will be followed:

Extraction and Analysis Method

Parameter	Technique	Soils/Solids	Liquids
VOCs	GC/MS	5030/8260	5030/8260
Semi-VOCs	GS/MS	3550/8270	3550/8270

E. CLOSURE PERFORMANCE:

BIOCELL Closure: As each half of each BIOCELL reaches the respective LDR criterion, weekly nutrient applications and soil blending will be terminated for that cell half. As each full BIOCELL is recorded at or below the LDR concentrations, weekly nutrient applications and soil blending will be terminated for that cell and the air supply for that cell will be disengaged.

When all BIOCELLs are recorded as having at or below LDR concentrations, the following tasks will be performed;

1) Liner capping materials will be removed and properly disposed of,

2) Air supply system and piping manifold will be disconnected and removed,
3) Hay bails will be removed and stockpiled in a designated area,
4) Soils will be distributed throughout the area creating a slightly southeasterly slope to maintain original surface low patterns, and
5) All non-paved or stone covered areas utilized during the remedial efforts will be seeded and covered with the stockpiled hay to prevent future soil erosion.

Decontamination: Decontamination of sampling equipment and tools will be performed in the following manner: 1) Hand brushed scrubbing with a surgical grade soap; 2) Rinsing with deionized water; 3) Followed by a hexane rinse; and, 4) Then towel dried with a non-printed towel. All sampling tools will be decontaminated prior to field activities and between sample recovery procedures to prevent cross contamination.

ATTACHMENT A
ACTIVITY REPORT

West Virginia Hazardous Waste Activity Report
Temporary Emergency Permit

I. **GENERATOR'S EPA ID NUMBER** **EMERGENCY PERMIT NUMBER:**

II. **NAME OF INSTALLATION:**

III. **INSTALLATION MAILING ADDRESS:**

Street or Post Office Box Number

County

City or Town **State** **Zip Code**

IV. **LOCATION OF INSTALLATION (If different from above):**

Street or Post Office Box Number

County

City or Town **State** **Zip Code**

V. **INSTALLATION CONTACT:**

Name (Last, First)

(Area) - **(Telephone)**

VI. **STANDARD INDUSTRIAL CLASSIFICATION CODE (4 DIGITS):**

|_|_|_|_|

VII. **DESCRIPTION OF ACTIVITY:**

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

VIII. **CERTIFICATION:**

I certify, under penalty of law, that I have personally examined and am familiar with the information submitted in this document and all attachments, and that, based on my inquiry of those responsibilities for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine(s) and imprisonment.

_____ _____

PRINTED NAME **TITLE**
(AUTHORIZED REPRESENTATIVE)

_____ _____

SIGNATURE **DATE**

ATTACHMENT B

REMEDIAL WORK PLAN

WORK PLAN FOR

REMEDIATION OF BURIED DRUMS

AND CONTAMINATED SOILS

CHEMICAL LEAMAN TANK LINES

CHARLESTON, WEST VIRGINIA

10 JULY 1995

PREPARED BY:

VECTOR ENTERPRISES, INC.
1050 COOPER ROAD
GRAYSON, GA. 30221
(404) 979-6666
(404) 985-2924 (FAX)

DIVISION OF ENVIRONMENTAL PROTECTION

CECIL H. UNDERWOOD
GOVERNOR

1356 Hansford Street
Charleston, WV 25301-1401

JOHN E. CAFFREY
DIRECTOR

February 10, 1998

Dr. Donald K. Emig
Enviropower, Inc.
102 Pickering Way
Exton, PA 19341-0200

Certified Mail
Return Receipt Requested

Dear Dr. Emig:

As you are aware, Consent Order HW-533-96 was entered between your facility and the Chief of the Office of Waste Management to guide the closure and post-closure activities at the former Chemical Leaman Tank Lines site in Institute, West Virginia.

Requirement number three of the Order calls for CLTL to apply for a closure and post-closure permit for the site. This application has not been made. CLTL is required to make application for the permit as agreed in the Consent Order.

Please contact me at 304 558 2505 within 10 days of certified receipt of this letter to discuss the completion of the Requirements of Order of the referenced Consent Order or simply send in your permit application to the Chief of the Office of Waste Management at the letterhead address.

Sincerely,

Carroll Cather

Carroll Cather,
Environmental Resource
Specialist III

cc: H. Michael Dorsey, CAER Asst. Chief
Tom Fisher, Inspector Supervisor
Henry Haas, Inspector
EPA Region III

DIVISION OF ENVIRONMENTAL PROTECTION

CECIL H. UNDERWOOD
GOVERNOR

1356 Hansford Street
Charleston, WV 25301-1401

JOHN E. CAFFREY
DIRECTOR

November 3, 1997

Dr. Donald Emig
Chemical Leaman Tank Lines, Inc.
102 Pickering Way
Exton, PA 19341-0200

Certified Mail
Return Receipt Requested

Re: Removal of Contaminated Soil from former Chemical Leaman Tank Lines, Inc. Terminal, Institute, WV/EPA ID No.: WVR 000 001 719

Dear Dr. Emig:

This letter is to conditionally approve the segregation, containerization and removal of contaminated soils from biocells at the referenced site as detailed in your letters of October 3, 1997 and October 21, 1997, in which you specified the soils to be removed from the biocells. The condition attached to this approval is that Enviropower, Inc. shall notify Inspector Supervisor Tom Fisher at least 72 hours in advance of the approved soil management activities.

Once those soils have been removed from the site, the remaining soils, which you represent have been successfully treated to levels below the Land Disposal Restriction standards found in 40 CFR Part 268, are to be placed in a waste pile, in accordance with a plan approved by this agency. Also, upon excavation and removal of the soils and relocation of the remaining soils within the facility boundary, Enviropower, Inc will make application to the Chief for a Closure/Post Closure Permit for ground water monitoring at the site as well as submit the waste pile management plan. We expect the approved soil removal to occur within thirty days of certified receipt of this letter.

If you have any questions or if I have misinterpreted or misunderstood your intentions, please contact ERS Carroll Cather of my staff at (304) 558-2505. Otherwise, proceed upon receipt of this approval letter and after providing the required notification to Mr. Fisher.

Sincerely,

H. Michael Dorsey, Asst. Chief
Compliance Monitoring and
Enforcement Section

HMD/CC

cc: Tom Fisher, Inspector Supervisor
Henry Haas, Environmental Inspector
Carroll Cather, ERS III
EPA Region III

DIVISION OF ENVIRONMENTAL PROTECTION

CECIL H. UNDERWOOD
GOVERNOR

1356 Hansford Street
Charleston, WV 25301-1401

JOHN E. CAFFREY
DIRECTOR

August 8, 1997

Donald K. Emig, Ph.D., P.E.
Vice President & Chief Engineer
EnviroPower, Inc.
102 Pickering Way
Exton, PA 19341-0200

Re: Chemical Leaman Tank Lines (Quala Systems, Inc.)
Bio-Remediation of Hazardous Waste Piles
EPA Identification Numbers: WVD000495655 and WVR000001719

Dear Mr. Emig:

Enclosed is a copy of the **Compliance Schedule Inspection Report** completed by representatives of the Chief from the Office of Waste Management. This report is based on the investigation conducted on July 29, 1997.

Thank you for your assistance and cooperation. If you have any questions concerning the inspection or attached report, please feel free to contact Inspector Henry E. Haas, Jr. at **(304) 558-5989**.

Sincerely,

Thomas A. Fisher

Thomas A. Fisher, Inspector Supervisor
Compliance Monitoring and Enforcement

TAF/kw

cc: Jeanne Sofield, U.S. EPA, Region III
Inspector Henry E. Haas, Jr.
File

COMPLIANCE SCHEDULE EVALUATION

RE: Chemical Leaman Tank Lines, Inc. (Quala Systems, Inc.)
Route 25, 1.2 Miles West of Exit 50 off I-64
Institute, WV
EPA Identification Number: WVD000495655
WVR000001719

DATE OF INSPECTION: July 29, 1997

INSPECTED BY: Inspector Henry E. Haas, Jr., WVDEP/OWM
Inspector David J. Cunningham, WVDEP/OWM

REPORT BY: Henry E. Haas, Jr.

Continuing Bio-Remediation of Hazardous Waste Piles

Upon arrival at approximately 1015 hours, we met with Mr. Jim McCune of Weavertown Environmental Group (WEG) and informed him that this was a routine oversight visit of the startup of this project. The previous day (or day one of the project) a severe thunder storm dumped approximately three (3) inches of water in the area in a relatively short period of time causing waters to accumulate in and around the waste piles. Environmental Inspector David Cunningham and I informed Mr. McCune to remove the waters immediately and seek permission from the Office of Water Resources to treat the water in the on-site wastewater treatment plant or the waters would have to be removed as a listed hazardous waste.

Mr. McCune stated that after the completion of a road to the rear of the site that the waters would be removed by the close of the working day. The water would be stored in a tanker truck until approval was obtained or removed from the site.

We thanked Mr. McCune for his time and departed the facility.

File Room

DIVISION OF ENVIRONMENTAL PROTECTION

CECIL H. UNDERWOOD
GOVERNOR

1356 HANSFORD STREET
CHARLESTON, WEST VIRGINIA

JOHN E. CAFFREY
DIRECTOR

April 10, 1997

Mr. Donald K. Emig, Ph.D., P.E.
Vice-President and Chief Engineer
ENVIRONPOWER, Inc.
102 Pickering Way
Exton, PA 19341-0200

RE: Chemical Leaman Tank Lines, Inc.
Institute, West Virginia

SUBJECT: Emergency Permit for Treatment of Bio-Cells

Dear Mr. Emig:

The Division of Environmental Protection, Office of Waste Management (OWM), has received your letter dated April 2, 1997, requesting an Emergency Permit for treatment of Bio-Cells at the above referenced site.

In light of a brief description provided with your submittal to this office, requesting an emergency permit, the OWM requests a more descriptive and detailed work plan which will address the present status of the Bio-Cells and the proposed treatment along with final closure/removal of the existing Bio-Cells at this site. Please be informed that there is a required five-hundred dollar ($500) fee for the emergency permit application. This fee should be submitted prior to our review of the application and should be made out to the *West Virginia Hazardous Waste Management Fund.*

If you should have any questions, or wish to arrange for a meeting, please feel free to contact me at the numbers provided on this letter.

Sincerely,

A. S. Talebi

Ahmad S. Talebi, Engineer
Hazardous Waste Management Section
Office of Waste Management

AST:cm
cc: Robert Greaves, US EPA Region III
G. S. Atwal, OWM Permitting
Mike Dorsey, OWM Compliance
Carroll Cather, OWM Compliance
Henry Haas, OWM Compliance
Tom Fisher, OWM Compliance

Division of Waste Management
1356 Hansford Street
Charleston, West Virginia 25301
(304) 558-5393
Fax Number (304) 558-0256

West Virginia Department of Environmental Protection

Bob Wise
Governor

Michael O. Callaghan
Cabinet Secretary

September 16, 2002

Mr. Roy Peterson
Quality Distribution, Incorporated
150 E. Penn Avenue, Suite 125
Downingtown, Pennsylvania 19335

Re: Chemical Leaman Tank Lines, Inc.
EPA ID Number: WVR000001719

Subject: Corrective Action Plan

Dear Mr. Peterson:

On Friday, September 13, 2002, I called Marc Reeves of Science Applications International Corporation (SAIC), the consultant working on the plan for corrective action, requesting a contingency measure to the plan.

The plan assumes that there is adequate bio organism present in the saturated zone to degrade the hazardous constituents and to consume the added oxygen and nutrients. This assumption is based on the somewhat limited data on dissolved oxygen, sulfate and nitrate depletion in the groundwater underlying the area.

If this assumption proves invalid and the addition of the oxygen and nutrients doesn't lead to an increased rate of biochemical degradation, the plan must have a provision for a contingency back-up, such as seeding the saturated zone with acclimated organisms capable of degrading these organic hazardous constituents. If the plan is permitted without the contingency provision, the permit would have to under go another modification to incorporate the necessary changes into the plan.

Please submit the requested revision along with material previously requested in my letter dated August 8, 2002 (basis for the 200 mg/l N in groundwater and compatibility of chemicals) which have not yet been submitted.

Division of Waste Management
1356 Hansford Street
Charleston, WV
(304) 558-5989
(304) 558-0256

West Virginia Department of Environmental Protection

Bob Wise
Governor

Michael O. Callaghan
Cabinet Secretary

August 7, 2002

Ron Baker
Chemical Leaman Tank Lines, Inc.
P.O. Box 588
St. Albans, WV 25177

Dear Mr. Baker:

Enclosed is a copy of the **Compliance Monitoring Evaluation (CME) Report** completed on your facility by a representative of the Director from the Division of Waste Management. This report is based on the inspection conducted on May 30, 2002.

There were no areas of non-compliance with the appropriate Hazardous Waste Management Regulations documented during the inspection.

Thank you for your assistance and cooperation. If you have any questions concerning the inspection or attached report, please feel free to contact Inspector David Farley at **(304) 558-5989 Extension 255**.

Sincerely,

Christopher M. Gatens

Christopher M. Gatens
Southern Unit Supervisor
Compliance Assurance and Emergency Response

CMG/kw

cc: Naomi Henry, U.S. EPA
Inspector David Farley
John Janicki, Permits Section/cover letter only
File

INSPECTION FACT SHEET

COMPANY NAME: **Chemical Leaman Tank Lines, Inc.**	**EPA ID#:** **WVR000001719**
MAILING ADDRESS: **P.O. Box 588, St. Albans, WV 25177**	**FACILITY TYPE:** **Land Disposal Facility**
LOCATION: **Rt. 25, 1.2 miles W, Exit 50 of I-64, Site B**	**COUNTY:** **Kanawha**
PHONE: **(304) 722-1400**	**HANDLING CODES:**
FACILITY CONTACT: **Ron Baker, Kevin Wehrle, Chris Couch**	**INSPECTION TYPE:** **Compliance Monitoring Evaluation**
APPLICABLE REGULATIONS: **40 CFR Part 260-279;Title 33, Series 20, WVDEP Hazardous Waste Management Rule.**	**HAZARDOUS WASTES GENERATED:** **See report**
DATE INSPECTED: **May 30, 2002**	**INSPECTORS:** **David Farley, Jeremy Bandy**
DATE PREPARED: **July 30, 2002**	**PREPARED BY:** **David Farley**

COMPLIANCE EVALUATION INSPECTION

RE:	**Chemical Leaman Tank Lines, Inc.**
DATE INSPECTED:	**May 30, 2002**
INSPECTED BY:	**David Farley, Jeremy Bandy**
DATE PREPARED:	**July 25, 2002**
PREPARED BY:	**David Farley**

On May 30, 2002, a Compliance Monitoring Evaluation (CME) inspection was conducted at the former Chemical Leaman Tank Lines facility at Institute, WV. The current operations at this site are now called Quality Carriers, which is the tanker trucking operation, and Quala Wash, which is the tanker cleaning part of the facility. Upon arrival at the facility we met with Ron Baker, who oversees the Quala Wash operation. Soon thereafter the company's sampling representatives (CT& E Environmental Services) arrived at the site and the groundwater sampling commenced.

The permitted Land Disposal Facility at the site is a result of investigations conducted by Christopher Gatens of the WVDEP. Sometime during the mid 1990's, Inspector Gatens worked with the WVDEP's Environmental Enforcement Unit as the lead inspector in groundwater monitoring compliance (currently he is the Inspector Supervisor for the RCRA Southern Unit) . At that time he interviewed a number of past employees and had reasonable cause to suspect that drums were buried at the site. The company agreed to dig to determine if the drums were actually present. An excavation was made and a large number of drums were unearthed. The company then removed the drums and obtained a RCRA Part B permit for an LDF.

At the present time Quality Distribution monitors the groundwater at this location on a semi-annual basis. Attached to this report is a schematic showing the location and numbering system for the wells on site. Monitoring data has shown that the groundwater at the facility has been impacted by the disposal actions that took place years ago. The present proposal for remediating the groundwater is In-Situ Biodegradation. This Request for Permit Modification #002 Revision 1 was submitted on July 3, 2002, and is currently being reviewed by the WVDEP. The State rejected the last proposal, which was a request for monitored natural attenuation.

There are a total of ten monitoring wells on site, listed as MW-101, MW-102, MW-103, MW-104, MW-105, MW-106, MW-107, MW-108, MW-109, and MW110. The wells are located around the area where the drums were excavated, and around the site where soil was stored during and after the excavation. These soil storage areas are described as the "former biocell area" and the "treated soil stockpile". A decision was made to sample the wells MW-104, MW-105, and MW-109. This decision was based upon sample results submitted by the company, as well as an estimate of the direction of groundwater flow (believed to be from the direction of MW-104 towards MW-109).

The three wells that were sampled were constructed with a 4" PVC inner casing. The wells had an outer casing that was made of steel. Locks were installed on the inner casing and a steel cover, bolted in place, was present on the surface seal. The concrete well apron is flush with the surface of the ground at these wells. Monitoring wells MW-108 and MW-109 were turbid. This appears to be as a result of poor well development (the solids looked to be well pack material).

Samples were collected during the inspection by using a 3" Teflon bailer, which was deconned prior to use in the next well. This method proved to be more time efficient than using a pump system. The wells were tested with a depth indicator and a standing well volume was calculated. The company's sampling contractor purges three well volumes prior to collecting the sample for analysis. Field readings were taken during the purging process. I have evaluated the CT & E Environmental Services person's sampling techniques on a number of occasions and found them to be satisfactory. No problems were observed during this inspection with respect to sampling, containers, preservation, etc.... Purge water from the wells was collected in fifty-five gallon drums pending analysis. This water will most likely be disposed of in the on site wastewater treatment system, if it tests non-hazardous. The following results are field readings taken on May 30, 2002, from those wells where split samples were taken:

Well	pH	Conductivity	Temperature
MW-104	6.95	1141	18.0
MW-105	6.59	1430	18.4
MW-109	6.55	705	18.9

Samples collected by the WVDEP on May 30, 2002, confirmed the presence of organic compounds in MW-104 and MW-105. Two compounds, diethyl phthalate and dimethyl phthalate, were detected in MW-109 at low concentrations. The following table lists the compounds detected in the monitoring wells during the May 30, 2002 CME.

	MW-104	
Parameter	WVDEP	CT & E
Total Lead, mg/l (dissolved)	<0.001	
Benzene, mg/l	0.064	
Chlorobenzene, mg/l	17.1	
2-Chlorotoluene, mg/l	0.044	
1,2-Dichlorobenzene, mg/l	0.314 (0.303)*	0.231
1,4-Dichlorobenzene, mg/l	0.086 (0.078)*	0.071
cis-1,2-Dichloroethene, mg/l	0.024	
Naphthalene, mg/l	0.062 (0.074)*	
Toluene, mg/l	0.045	
Trichloroethene, mg/l	0.044	
Vinyl chloride, mg/l	0.010	<0.250
o-Xylene, mg/l	0.027	
m,p-Xylene, mg/l	0.030	
Bis(2-chloroethyl)ether, mg/l	0.012	
Bis(2chloroisopropyl)ether, mg/l	0.142	
2-Chlorophenol, mg/l	0.018	
Diethyl phthalate, mg/l	0.011	

* This result is from the GC/MS run on the 8270 scan.

Chlorobenzene is present in the well at a significant concentration. The Title 46, Series 12, Water Resources Board Requirements Governing Groundwater Standards, has the limit for monochlorobenzene at 0.1 mg/l. The sample collected here is well in excess of that limit.

	MW-105	
Parameter	WVDEP	CT & E
Total Lead, mg/l (dissolved)	<0.001	
Chlorobenzene, mg/l	0.087	<0.005
1,2-Dichlorobenzene, mg/l	0.0079	<0.010
Diethyl phthalate, mg/l	0.196	
Dimethyl phthalate, mg/l	0.017	

	MW-109	
Parameter	WVDEP	CT & E
Diethyl phthalate, mg/l	0.387	
Dimethyl phthalate, mg/l	0.036	

** The sample results from the laboratory are attached with this report.

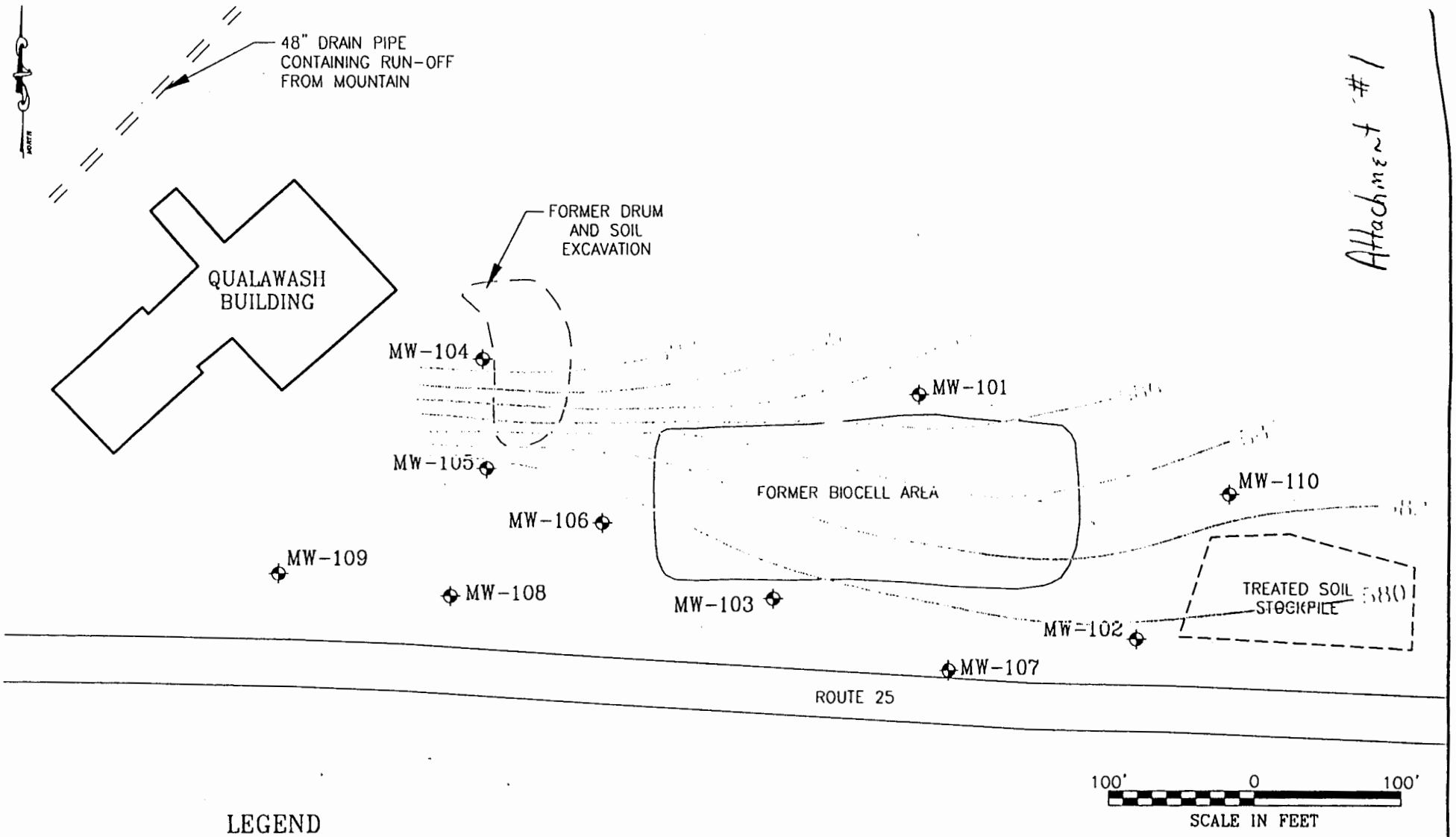
Summary/Conclusion

- Groundwater in monitoring well # MW-104 shows that organic contamination has occurred from the drum disposal that occurred years ago. Chlorobenzene is the compound that is present in the highest concentration. The result, 17.1 mg/l, is well above the Groundwater Standards as outlined in Title 46, Series 12, of the Water Resources Board Requirements Governing Standards.

- No deficiencies were observed with the sampling procedures for the monitoring wells.

- Monitoring wells MW-105 and MW-109 were turbid and solids were seen in the bailers during purging. This is an indication of poor well development.

Attachment #1



LEGEND

MW-101 MONITORING WELL LOCATION

GROUNDWATER ELEVATION IN FEET

GROUNDWATER CONTOUR (DASHED WHERE INFERRED)

NOTE: WELL LOCATIONS FROM A MAP PREPARED BY EAGLE SURVEYING, INC.

QUALITY DISTRIBUTION, INC.

INSTITUTE, W.VA

GROUNDWATER CONTOUR MAP
JUNE 25, 2001

drawn RAM	checked	approved MAC	figure no 2
date 07/17/01	date	date 7/17/01	
job no 01-1633-00-3973-207		file no 03973-017-A	

SAIC. Science Applications International Corporation
An Employee-Owned Company

REI Consultants Inc.

Date: 24-Jun-02

Client: WV DEP - CHARLESTON
Client Sample ID: DF-5-30-02-1
Project: DF-5-30-02
Site ID:

Lab Order: 0205966
Lab ID: 0205966-01A
Collection Date: 5/30/2002
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
LEAD, Dissolved		E239.2					
Lead	ND	mg/L	0.001	0.010		06/04/02	GD

Chemical Leaman Tank Lines

MW-104

WVR000001719

Abbreviations: ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers: J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

Chemical Leaman Tank Lines
WVR000001719
MW-104

REI Consultants Inc.

Date: 24-Jun-02

Client: WV DEP - CHARLESTON
Client Sample ID: DF-5-30-02-1
Project: DF-5-30-02
Site ID:

Lab Order: 0205966
Lab ID: 0205966-01A
Collection Date: 5/30/2002
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		SW8260B					
2-Butanone	ND	µg/L	NA	100		06/03/02	WM
2-Hexanone	ND	µg/L	NA	100		06/03/02	WM
4-Methyl-2-pentanone	ND	µg/L	NA	100		06/03/02	WM
Acetone	ND	µg/L	NA	200		06/03/02	WM
Acrolein	ND	µg/L	NA	100		06/03/02	WM
Acrylonitrile	ND	µg/L	NA	100		06/03/02	WM
Carbon disulfide	ND	µg/L	NA	100		06/03/02	WM
Iodomethane	ND	µg/L	NA	100		06/03/02	WM
Vinyl acetate	ND	µg/L	NA	100		06/03/02	WM
Benzene	64.1	µg/L	NA	10.0		06/03/02	WM
Bromobenzene	ND	µg/L	NA	10.0		06/03/02	WM
Bromochloromethane	ND	µg/L	NA	10.0		06/03/02	WM
Bromodichloromethane	ND	µg/L	NA	10.0		06/03/02	WM
Bromoform	ND	µg/L	NA	10.0		06/03/02	WM
Bromomethane	ND	µg/L	NA	10.0		06/03/02	WM
n-Butylbenzene	ND	µg/L	NA	10.0		06/03/02	WM
sec-Butylbenzene	ND	µg/L	NA	10.0		06/03/02	WM
tert-Butylbenzene	ND	µg/L	NA	10.0		06/03/02	WM
Carbon tetrachloride	ND	µg/L	NA	10.0		06/03/02	WM
Chlorobenzene	17,100	µg/L	NA	1,000		06/04/02	WM
Chloroethane	ND	µg/L	NA	10.0		06/03/02	WM
Chloroform	ND	µg/L	NA	10.0		06/03/02	WM
Chloromethane	ND	µg/L	NA	10.0		06/03/02	WM
2-Chlorotoluene	44.1	µg/L	NA	10.0		06/03/02	WM
4-Chlorotoluene	ND	µg/L	NA	10.0		06/03/02	WM
Dibromochloromethane	ND	µg/L	NA	10.0		06/03/02	WM
1,2-Dibromo-3-chloropropane	ND	µg/L	NA	10.0		06/03/02	WM
1,2-Dibromoethane	ND	µg/L	NA	10.0		06/03/02	WM
Dibromomethane	ND	µg/L	NA	10.0		06/03/02	WM
1,2-Dichlorobenzene	314	µg/L	NA	50.0		06/03/02	WM
1,3-Dichlorobenzene	ND	µg/L	NA	10.0		06/03/02	WM
1,4-Dichlorobenzene	86.0	µg/L	NA	10.0		06/03/02	WM
Dichlorodifluoromethane	ND	µg/L	NA	10.0		06/03/02	WM
1,1-Dichloroethane	ND	µg/L	NA	10.0		06/03/02	WM
1,2-Dichloroethane	ND	µg/L	NA	10.0		06/03/02	WM
1,1-Dichloroethene	ND	µg/L	NA	10.0		06/03/02	WM
cis-1,2-Dichloroethene	24.3	µg/L	NA	10.0		06/03/02	WM
trans-1,2-Dichloroethene	ND	µg/L	NA	10.0		06/03/02	WM
1,2-Dichloropropane	ND	µg/L	NA	10.0		06/03/02	WM
1,3-Dichloropropane	ND	µg/L	NA	10.0		06/03/02	WM

Abbreviations: ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers: J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 24-Jun-02

Client: WV DEP - CHARLESTON
Client Sample ID: DF-5-30-02-1
Project: DF-5-30-02
Site ID:

Lab Order: 0205966
Lab ID: 0205966-01A
Collection Date: 5/30/2002
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
2,2-Dichloropropane	ND	µg/L	NA	10.0		06/03/02	WM
1,1-Dichloropropene	ND	µg/L	NA	10.0		06/03/02	WM
cis-1,3-Dichloropropene	ND	µg/L	NA	10.0		06/03/02	WM
trans-1,3-Dichloropropene	ND	µg/L	NA	10.0		06/03/02	WM
Ethylbenzene	206	µg/L	NA	10.0		06/03/02	WM
Hexachlorobutadiene	ND	µg/L	NA	10.0		06/03/02	WM
Isopropylbenzene	ND	µg/L	NA	10.0		06/03/02	WM
4-Isopropyltoluene	ND	µg/L	NA	10.0		06/03/02	WM
Methylene chloride	ND	µg/L	NA	10.0		06/03/02	WM
Naphthalene	62.2	µg/L	NA	10.0		06/03/02	WM
n-Propylbenzene	ND	µg/L	NA	10.0		06/03/02	WM
Styrene	ND	µg/L	NA	10.0		06/03/02	WM
1,1,1,2-Tetrachloroethane	ND	µg/L	NA	10.0		06/03/02	WM
1,1,2,2-Tetrachloroethane	ND	µg/L	NA	10.0		06/03/02	WM
Tetrachloroethene	ND	µg/L	NA	10.0		06/03/02	WM
Toluene	44.9	µg/L	NA	10.0		06/03/02	WM
1,2,3-Trichlorobenzene	ND	µg/L	NA	10.0		06/03/02	WM
1,2,4-Trichlorobenzene	ND	µg/L	NA	10.0		06/03/02	WM
1,1,1-Trichloroethane	ND	µg/L	NA	10.0		06/03/02	WM
1,1,2-Trichloroethane	ND	µg/L	NA	10.0		06/03/02	WM
Trichloroethene	44.0	µg/L	NA	10.0		06/03/02	WM
Trichlorofluoromethane	ND	µg/L	NA	10.0		06/03/02	WM
1,2,3-Trichloropropane	ND	µg/L	NA	10.0		06/03/02	WM
1,2,4-Trimethylbenzene	ND	µg/L	NA	10.0		06/03/02	WM
1,3,5-Trimethylbenzene	ND	µg/L	NA	10.0		06/03/02	WM
Vinyl chloride	10.4	µg/L	NA	10.0		06/03/02	WM
o-Xylene	27.0	µg/L	NA	10.0		06/03/02	WM
m,p-Xylene	30.0	µg/L	NA	20.0		06/03/02	WM
Surr: 1,2-Dichloroethane-d4	113	%REC	NA	80-120		06/03/02	WM
Surr: 4-Bromofluorobenzene	100	%REC	NA	86-115		06/03/02	WM
Surr: Dibromofluoromethane	103	%REC	NA	80-120		06/03/02	WM
Surr: Toluene-d8	102	%REC	NA	88-110		06/03/02	WM

Chemical Leaman Tank Lines
WVR000001719
MW-104

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

Chemical Leamm Tank Lines
WVR000001719
MW-104

REI Consultants Inc.

Date: 24-Jun-02

Client: WV DEP - CHARLESTON
Client Sample ID: DF-5-30-02-1
Project: DF-5-30-02
Site ID:

Lab Order: 0205966
Lab ID: 0205966-01A
Collection Date: 5/30/2002
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
SEMIVOLATILE ORGANIC COMPOUNDS		SW8270C					
Acenaphthene	ND	mg/L	NA	0.010		06/06/02	WP
Acenaphthylene	ND	mg/L	NA	0.010		06/06/02	WP
Anthracene	ND	mg/L	NA	0.010		06/06/02	WP
Benzidine	ND	mg/L	NA	0.010		06/06/02	WP
Benzo(a)anthracene	ND	mg/L	NA	0.010		06/06/02	WP
Benzo(a)pyrene	ND	mg/L	NA	0.010		06/06/02	WP
Benzo(b)fluoranthene	ND	mg/L	NA	0.010		06/06/02	WP
Benzo(g,h,i)perylene	ND	mg/L	NA	0.010		06/06/02	WP
Benzo(k)fluoranthene	ND	mg/L	NA	0.010		06/06/02	WP
Bis(2-chloroethoxy)methane	ND	mg/L	NA	0.010		06/06/02	WP
Bis(2-chloroethyl)ether	0.012	mg/L	NA	0.010		06/06/02	WP
Bis(2-chloroisopropyl)ether	0.142	mg/L	NA	0.010		06/06/02	WP
Bis(2-ethylhexyl)phthalate	ND	mg/L	NA	0.010		06/06/02	WP
4-Bromophenyl phenyl ether	ND	mg/L	NA	0.010		06/06/02	WP
Butyl benzyl phthalate	ND	mg/L	NA	0.010		06/06/02	WP
4-Chloro-3-methylphenol	ND	mg/L	NA	0.010		06/06/02	WP
2-Chloronaphthalene	ND	mg/L	NA	0.010		06/06/02	WP
2-Chlorophenol	0.018	mg/L	NA	0.010		06/06/02	WP
4-Chlorophenyl phenyl ether	ND	mg/L	NA	0.010		06/06/02	WP
Chrysene	ND	mg/L	NA	0.010		06/06/02	WP
o-Cresol	ND	mg/L	NA	0.010		06/06/02	WP
m,p-Cresol	ND	mg/L	NA	0.021		06/06/02	WP
Dibenzo(a,h)anthracene	ND	mg/L	NA	0.010		06/06/02	WP
Di-n-butyl phthalate	ND	mg/L	NA	0.010		06/06/02	WP
1,2-Dichlorobenzene	0.303	mg/L	NA	0.104		06/15/02	WP
1,3-Dichlorobenzene	ND	mg/L	NA	0.010		06/06/02	WP
1,4-Dichlorobenzene	0.078	mg/L	NA	0.010		06/06/02	WP
3,3'-Dichlorobenzidine	ND	mg/L	NA	0.010		06/06/02	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.010		06/06/02	WP
Diethyl phthalate	0.011	mg/L	NA	0.010		06/06/02	WP
Dimethyl phthalate	ND	mg/L	NA	0.010		06/06/02	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.010		06/06/02	WP
4,6-Dinitro-2-methylphenol	ND	mg/L	NA	0.010		06/06/02	WP
2,4-Dinitrophenol	ND	mg/L	NA	0.010		06/06/02	WP
2,4-Dinitrotoluene	ND	mg/L	NA	0.010		06/06/02	WP
2,6-Dinitrotoluene	ND	mg/L	NA	0.010		06/06/02	WP
Di-n-octyl phthalate	ND	mg/L	NA	0.010		06/06/02	WP
1,2-Diphenylhydrazine	ND	mg/L	NA	0.010		06/06/02	WP
Fluoranthene	ND	mg/L	NA	0.010		06/06/02	WP
Fluorene	ND	mg/L	NA	0.010		06/06/02	WP

Abbreviations: ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers: J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

Chemical Leaman Tank Lines
WVR000001719
MW-104

REI Consultants Inc.

Date: 24-Jun-02

Client: WV DEP - CHARLESTON
Client Sample ID: DF-5-30-02-1
Project: DF-5-30-02
Site ID:

Lab Order: 0205966
Lab ID: 0205966-01A
Collection Date: 5/30/2002
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
Hexachlorobenzene	ND	mg/L	NA	0.010		06/06/02	WP
Hexachlorobutadiene	ND	mg/L	NA	0.010		06/06/02	WP
Hexachlorocyclopentadiene	ND	mg/L	NA	0.010		06/06/02	WP
Hexachloroethane	ND	mg/L	NA	0.010		06/06/02	WP
Indeno(1,2,3-cd)pyrene	ND	mg/L	NA	0.010		06/06/02	WP
Isophorone	ND	mg/L	NA	0.010		06/06/02	WP
Naphthalene	0.074	mg/L	NA	0.010		06/06/02	WP
Nitrobenzene	ND	mg/L	NA	0.010		06/06/02	WP
2-Nitrophenol	ND	mg/L	NA	0.010		06/06/02	WP
4-Nitrophenol	ND	mg/L	NA	0.010		06/06/02	WP
N-Nitrosodimethylamine	ND	mg/L	NA	0.010		06/06/02	WP
N-Nitrosodiphenylamine	ND	mg/L	NA	0.010		06/06/02	WP
N-Nitrosodi-n-propylamine	ND	mg/L	NA	0.010		06/06/02	WP
Pentachlorophenol	ND	mg/L	NA	0.010		06/06/02	WP
Phenanthrene	ND	mg/L	NA	0.010		06/06/02	WP
Phenol	ND	mg/L	NA	0.010		06/06/02	WP
Pyrene	ND	mg/L	NA	0.010		06/06/02	WP
1,2,4-Trichlorobenzene	ND	mg/L	NA	0.010		06/06/02	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.010		06/06/02	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.010		06/06/02	WP
Surr: 2,4,6-Tribromophenol	83	%REC	NA	10-123		06/06/02	WP
Surr: 2-Fluorobiphenyl	70	%REC	NA	43-116		06/06/02	WP
Surr: 2-Fluorophenol	44	%REC	NA	21-100		06/06/02	WP
Surr: 4-Terphenyl-d14	89	%REC	NA	33-141		06/06/02	WP
Surr: Nitrobenzene-d5	77	%REC	NA	35-114		06/06/02	WP
Surr: Phenol-d5	50	%REC	NA	10-110		06/06/02	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
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NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 24-Jun-02

Client: WV DEP - CHARLESTON
Client Sample ID: DF-5-30-02-2
Project: DF-5-30-02
Site ID:

Lab Order: 0205966
Lab ID: 0205966-02A
Collection Date: 5/30/2002
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
LEAD, Dissolved		E239.2					
Lead	ND	mg/L	0.001	0.010		06/04/02	GD

Chemical Leaman Tank Lines
WVR000001719
MW-105

Abbreviations:
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NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

Chemical Lemon Tank Lines
WVR000001719
MW-105

REI Consultants Inc.

Date: 24-Jun-02

Client: WV DEP - CHARLESTON
Client Sample ID: DF-5-30-02-2
Project: DF-5-30-02
Site ID:

Lab Order: 0205966
Lab ID: 0205966-02A
Collection Date: 5/30/2002
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		SW8260B					
2-Butanone	ND	µg/L	NA	50.0		06/03/02	WM
2-Hexanone	ND	µg/L	NA	50.0		06/03/02	WM
4-Methyl-2-pentanone	ND	µg/L	NA	50.0		06/03/02	WM
Acetone	ND	µg/L	NA	100		06/03/02	WM
Acrolein	ND	µg/L	NA	50.0		06/03/02	WM
Acrylonitrile	ND	µg/L	NA	50.0		06/03/02	WM
Carbon disulfide	ND	µg/L	NA	50.0		06/03/02	WM
Iodomethane	ND	µg/L	NA	50.0		06/03/02	WM
Vinyl acetate	ND	µg/L	NA	50.0		06/03/02	WM
Benzene	ND	µg/L	NA	5.0		06/03/02	WM
Bromobenzene	ND	µg/L	NA	5.0		06/03/02	WM
Bromochloromethane	ND	µg/L	NA	5.0		06/03/02	WM
Bromodichloromethane	ND	µg/L	NA	5.0		06/03/02	WM
Bromoform	ND	µg/L	NA	5.0		06/03/02	WM
Bromomethane	ND	µg/L	NA	5.0		06/03/02	WM
n-Butylbenzene	ND	µg/L	NA	5.0		06/03/02	WM
sec-Butylbenzene	ND	µg/L	NA	5.0		06/03/02	WM
tert-Butylbenzene	ND	µg/L	NA	5.0		06/03/02	WM
Carbon tetrachloride	ND	µg/L	NA	5.0		06/03/02	WM
Chlorobenzene	87.0	µg/L	NA	50.0		06/04/02	WM
Chloroethane	ND	µg/L	NA	5.0		06/03/02	WM
Chloroform	ND	µg/L	NA	5.0		06/03/02	WM
Chloromethane	ND	µg/L	NA	5.0		06/03/02	WM
2-Chlorotoluene	ND	µg/L	NA	5.0		06/03/02	WM
4-Chlorotoluene	ND	µg/L	NA	5.0		06/03/02	WM
Dibromochloromethane	ND	µg/L	NA	5.0		06/03/02	WM
1,2-Dibromo-3-chloropropane	ND	µg/L	NA	5.0		06/03/02	WM
1,2-Dibromoethane	ND	µg/L	NA	5.0		06/03/02	WM
Dibromomethane	ND	µg/L	NA	5.0		06/03/02	WM
1,2-Dichlorobenzene	7.9	µg/L	NA	5.0		06/03/02	WM
1,3-Dichlorobenzene	ND	µg/L	NA	5.0		06/03/02	WM
1,4-Dichlorobenzene	ND	µg/L	NA	5.0		06/03/02	WM
Dichlorodifluoromethane	ND	µg/L	NA	5.0		06/03/02	WM
1,1-Dichloroethane	ND	µg/L	NA	5.0		06/03/02	WM
1,2-Dichloroethane	ND	µg/L	NA	5.0		06/03/02	WM
1,1-Dichloroethene	ND	µg/L	NA	5.0		06/03/02	WM
cis-1,2-Dichloroethene	ND	µg/L	NA	5.0		06/03/02	WM
trans-1,2-Dichloroethene	ND	µg/L	NA	5.0		06/03/02	WM
1,2-Dichloropropane	ND	µg/L	NA	5.0		06/03/02	WM
1,3-Dichloropropane	ND	µg/L	NA	5.0		06/03/02	WM

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 24-Jun-02

Client: WV DEP - CHARLESTON
Client Sample ID: DF-5-30-02-2
Project: DF-5-30-02
Site ID:

Lab Order: 0205966
Lab ID: 0205966-02A
Collection Date: 5/30/2002
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
2,2-Dichloropropane	ND	µg/L	NA	5.0		06/03/02	WM
1,1-Dichloropropene	ND	µg/L	NA	5.0		06/03/02	WM
cis-1,3-Dichloropropene	ND	µg/L	NA	5.0		06/03/02	WM
trans-1,3-Dichloropropene	ND	µg/L	NA	5.0		06/03/02	WM
Ethylbenzene	ND	µg/L	NA	5.0		06/03/02	WM
Hexachlorobutadiene	ND	µg/L	NA	5.0		06/03/02	WM
Isopropylbenzene	ND	µg/L	NA	5.0		06/03/02	WM
4-Isopropyltoluene	ND	µg/L	NA	5.0		06/03/02	WM
Methylene chloride	ND	µg/L	NA	5.0		06/03/02	WM
Naphthalene	ND	µg/L	NA	5.0		06/03/02	WM
n-Propylbenzene	ND	µg/L	NA	5.0		06/03/02	WM
Styrene	ND	µg/L	NA	5.0		06/03/02	WM
1,1,1,2-Tetrachloroethane	ND	µg/L	NA	5.0		06/03/02	WM
1,1,2,2-Tetrachloroethane	ND	µg/L	NA	5.0		06/03/02	WM
Tetrachloroethene	ND	µg/L	NA	5.0		06/03/02	WM
Toluene	ND	µg/L	NA	5.0		06/03/02	WM
1,2,3-Trichlorobenzene	ND	µg/L	NA	5.0		06/03/02	WM
1,2,4-Trichlorobenzene	ND	µg/L	NA	5.0		06/03/02	WM
1,1,1-Trichloroethane	ND	µg/L	NA	5.0		06/03/02	WM
1,1,2-Trichloroethane	ND	µg/L	NA	5.0		06/03/02	WM
Trichloroethene	ND	µg/L	NA	5.0		06/03/02	WM
Trichlorofluoromethane	ND	µg/L	NA	5.0		06/03/02	WM
1,2,3-Trichloropropane	ND	µg/L	NA	5.0		06/03/02	WM
1,2,4-Trimethylbenzene	ND	µg/L	NA	5.0		06/03/02	WM
1,3,5-Trimethylbenzene	ND	µg/L	NA	5.0		06/03/02	WM
Vinyl chloride	ND	µg/L	NA	5.0		06/03/02	WM
o-Xylene	ND	µg/L	NA	5.0		06/03/02	WM
m,p-Xylene	ND	µg/L	NA	10.0		06/03/02	WM
Surr: 1,2-Dichloroethane-d4	114	%REC	NA	80-120		06/03/02	WM
Surr: 4-Bromofluorobenzene	103	%REC	NA	86-115		06/03/02	WM
Surr: Dibromofluoromethane	107	%REC	NA	80-120		06/03/02	WM
Surr: Toluene-d8	100	%REC	NA	88-110		06/03/02	WM

Chemical Leaman Tank Lines
WVR000001719
MW-105

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

Chemical Leaman Tank Lines
WVR000001719
MW-105

REI Consultants Inc.

Date: 24-Jun-02

Client: WV DEP - CHARLESTON
Client Sample ID: DF-5-30-02-2
Project: DF-5-30-02
Site ID:

Lab Order: 0205966
Lab ID: 0205966-02A
Collection Date: 5/30/2002
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
SEMIVOLATILE ORGANIC COMPOUNDS		SW8270C					
Acenaphthene	ND	mg/L	NA	0.011		06/06/02	WP
Acenaphthylene	ND	mg/L	NA	0.011		06/06/02	WP
Anthracene	ND	mg/L	NA	0.011		06/06/02	WP
Benzidine	ND	mg/L	NA	0.011		06/06/02	WP
Benzo(a)anthracene	ND	mg/L	NA	0.011		06/06/02	WP
Benzo(a)pyrene	ND	mg/L	NA	0.011		06/06/02	WP
Benzo(b)fluoranthene	ND	mg/L	NA	0.011		06/06/02	WP
Benzo(g,h,i)perylene	ND	mg/L	NA	0.011		06/06/02	WP
Benzo(k)fluoranthene	ND	mg/L	NA	0.011		06/06/02	WP
Bis(2-chloroethoxy)methane	ND	mg/L	NA	0.011		06/06/02	WP
Bis(2-chloroethyl)ether	ND	mg/L	NA	0.011		06/06/02	WP
Bis(2-chloroisopropyl)ether	ND	mg/L	NA	0.011		06/06/02	WP
Bis(2-ethylhexyl)phthalate	ND	mg/L	NA	0.011		06/06/02	WP
4-Bromophenyl phenyl ether	ND	mg/L	NA	0.011		06/06/02	WP
Butyl benzyl phthalate	ND	mg/L	NA	0.011		06/06/02	WP
4-Chloro-3-methylphenol	ND	mg/L	NA	0.011		06/06/02	WP
2-Chloronaphthalene	ND	mg/L	NA	0.011		06/06/02	WP
2-Chlorophenol	ND	mg/L	NA	0.011		06/06/02	WP
4-Chlorophenyl phenyl ether	ND	mg/L	NA	0.011		06/06/02	WP
Chrysene	ND	mg/L	NA	0.011		06/06/02	WP
o-Cresol	ND	mg/L	NA	0.011		06/06/02	WP
m,p-Cresol	ND	mg/L	NA	0.023		06/06/02	WP
Dibenzo(a,h)anthracene	ND	mg/L	NA	0.011		06/06/02	WP
Di-n-butyl phthalate	ND	mg/L	NA	0.011		06/06/02	WP
1,2-Dichlorobenzene	ND	mg/L	NA	0.011		06/06/02	WP
1,3-Dichlorobenzene	ND	mg/L	NA	0.011		06/06/02	WP
1,4-Dichlorobenzene	ND	mg/L	NA	0.011		06/06/02	WP
3,3'-Dichlorobenzidine	ND	mg/L	NA	0.011		06/06/02	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.011		06/06/02	WP
Diethyl phthalate	0.196	mg/L	NA	0.011		06/06/02	WP
Dimethyl phthalate	0.017	mg/L	NA	0.011		06/06/02	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.011		06/06/02	WP
4,6-Dinitro-2-methylphenol	ND	mg/L	NA	0.011		06/06/02	WP
2,4-Dinitrophenol	ND	mg/L	NA	0.011		06/06/02	WP
2,4-Dinitrotoluene	ND	mg/L	NA	0.011		06/06/02	WP
2,6-Dinitrotoluene	ND	mg/L	NA	0.011		06/06/02	WP
Di-n-octyl phthalate	ND	mg/L	NA	0.011		06/06/02	WP
1,2-Diphenylhydrazine	ND	mg/L	NA	0.011		06/06/02	WP
Fluoranthene	ND	mg/L	NA	0.011		06/06/02	WP
Fluorene	ND	mg/L	NA	0.011		06/06/02	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 24-Jun-02

Client: WV DEP - CHARLESTON
Client Sample ID: DF-5-30-02-2
Project: DF-5-30-02
Site ID:

Lab Order: 0205966
Lab ID: 0205966-02A
Collection Date: 5/30/2002
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
Hexachlorobenzene	ND	mg/L	NA	0.011		06/06/02	WP
Hexachlorobutadiene	ND	mg/L	NA	0.011		06/06/02	WP
Hexachlorocyclopentadiene	ND	mg/L	NA	0.011		06/06/02	WP
Hexachloroethane	ND	mg/L	NA	0.011		06/06/02	WP
Indeno(1,2,3-cd)pyrene	ND	mg/L	NA	0.011		06/06/02	WP
Isophorone	ND	mg/L	NA	0.011		06/06/02	WP
Naphthalene	ND	mg/L	NA	0.011		06/06/02	WP
Nitrobenzene	ND	mg/L	NA	0.011		06/06/02	WP
2-Nitrophenol	ND	mg/L	NA	0.011		06/06/02	WP
4-Nitrophenol	ND	mg/L	NA	0.011		06/06/02	WP
N-Nitrosodimethylamine	ND	mg/L	NA	0.011		06/06/02	WP
N-Nitrosodiphenylamine	ND	mg/L	NA	0.011		06/06/02	WP
N-Nitrosodi-n-propylamine	ND	mg/L	NA	0.011		06/06/02	WP
Pentachlorophenol	ND	mg/L	NA	0.011		06/06/02	WP
Phenanthrene	ND	mg/L	NA	0.011		06/06/02	WP
Phenol	ND	mg/L	NA	0.011		06/06/02	WP
Pyrene	ND	mg/L	NA	0.011		06/06/02	WP
1,2,4-Trichlorobenzene	ND	mg/L	NA	0.011		06/06/02	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.011		06/06/02	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.011		06/06/02	WP
Surr: 2,4,6-Tribromophenol	50	%REC	NA	10-123		06/06/02	WP
Surr: 2-Fluorobiphenyl	64	%REC	NA	43-116		06/06/02	WP
Surr: 2-Fluorophenol	2	%REC	NA	21-100	S	06/06/02	WP
Surr: 4-Terphenyl-d14	79	%REC	NA	33-141		06/06/02	WP
Surr: Nitrobenzene-d5	72	%REC	NA	35-114		06/06/02	WP
Surr: Phenol-d5	1	%REC	NA	10-110	S	06/06/02	WP

Chemical Leaman Tank Lines
WVR000001719
MW-105

Abbreviations: ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers: J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

Chemical Leggett Tank Lines
WVR000001719
MW-109

REI Consultants Inc.

Date: 24-Jun-02

Client: WV DEP - CHARLESTON
Client Sample ID: DF-5-30-02-3
Project: DF-5-30-02
Site ID:

Lab Order: 0205966
Lab ID: 0205966-03A
Collection Date: 5/30/2002
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
VOLATILE ORGANIC COMPOUNDS		SW8260B					
2-Butanone	ND	µg/L	NA	10.0		06/03/02	WM
2-Hexanone	ND	µg/L	NA	10.0		06/03/02	WM
4-Methyl-2-pentanone	ND	µg/L	NA	10.0		06/03/02	WM
Acetone	ND	µg/L	NA	20.0		06/03/02	WM
Acrolein	ND	µg/L	NA	10.0		06/03/02	WM
Acrylonitrile	ND	µg/L	NA	10.0		06/03/02	WM
Carbon disulfide	ND	µg/L	NA	10.0		06/03/02	WM
Iodomethane	ND	µg/L	NA	10.0		06/03/02	WM
Vinyl acetate	ND	µg/L	NA	10.0		06/03/02	WM
Benzene	ND	µg/L	NA	1.0		06/03/02	WM
Bromobenzene	ND	µg/L	NA	1.0		06/03/02	WM
Bromochloromethane	ND	µg/L	NA	1.0		06/03/02	WM
Bromodichloromethane	ND	µg/L	NA	1.0		06/03/02	WM
Bromoform	ND	µg/L	NA	1.0		06/03/02	WM
Bromomethane	ND	µg/L	NA	1.0		06/03/02	WM
n-Butylbenzene	ND	µg/L	NA	1.0		06/03/02	WM
sec-Butylbenzene	ND	µg/L	NA	1.0		06/03/02	WM
tert-Butylbenzene	ND	µg/L	NA	1.0		06/03/02	WM
Carbon tetrachloride	ND	µg/L	NA	1.0		06/03/02	WM
Chlorobenzene	ND	µg/L	NA	1.0		06/03/02	WM
Chloroethane	ND	µg/L	NA	1.0		06/03/02	WM
Chloroform	ND	µg/L	NA	1.0		06/03/02	WM
Chloromethane	ND	µg/L	NA	1.0		06/03/02	WM
2-Chlorotoluene	ND	µg/L	NA	1.0		06/03/02	WM
4-Chlorotoluene	ND	µg/L	NA	1.0		06/03/02	WM
Dibromochloromethane	ND	µg/L	NA	1.0		06/03/02	WM
1,2-Dibromo-3-chloropropane	ND	µg/L	NA	1.0		06/03/02	WM
1,2-Dibromoethane	ND	µg/L	NA	1.0		06/03/02	WM
Dibromomethane	ND	µg/L	NA	1.0		06/03/02	WM
1,2-Dichlorobenzene	ND	µg/L	NA	1.0		06/03/02	WM
1,3-Dichlorobenzene	ND	µg/L	NA	1.0		06/03/02	WM
1,4-Dichlorobenzene	ND	µg/L	NA	1.0		06/03/02	WM
Dichlorodifluoromethane	ND	µg/L	NA	1.0		06/03/02	WM
1,1-Dichloroethane	ND	µg/L	NA	1.0		06/03/02	WM
1,2-Dichloroethane	ND	µg/L	NA	1.0		06/03/02	WM
1,1-Dichloroethene	ND	µg/L	NA	1.0		06/03/02	WM
cis-1,2-Dichloroethene	ND	µg/L	NA	1.0		06/03/02	WM
trans-1,2-Dichloroethene	ND	µg/L	NA	1.0		06/03/02	WM
1,2-Dichloropropane	ND	µg/L	NA	1.0		06/03/02	WM
1,3-Dichloropropane	ND	µg/L	NA	1.0		06/03/02	WM

Abbreviations: ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers: J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

Chemical Leaman Tank Lines
WVR000001719
MW-109

REI Consultants Inc.

Date: 24-Jun-02

Client: WV DEP - CHARLESTON
Client Sample ID: DF-5-30-02-3
Project: DF-5-30-02
Site ID:

Lab Order: 0205966
Lab ID: 0205966-03A
Collection Date: 5/30/2002
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
2,2-Dichloropropane	ND	µg/L	NA	1.0		06/03/02	WM
1,1-Dichloropropene	ND	µg/L	NA	1.0		06/03/02	WM
cis-1,3-Dichloropropene	ND	µg/L	NA	1.0		06/03/02	WM
trans-1,3-Dichloropropene	ND	µg/L	NA	1.0		06/03/02	WM
Ethylbenzene	ND	µg/L	NA	1.0		06/03/02	WM
Hexachlorobutadiene	ND	µg/L	NA	1.0		06/03/02	WM
Isopropylbenzene	ND	µg/L	NA	1.0		06/03/02	WM
4-Isopropyltoluene	ND	µg/L	NA	1.0		06/03/02	WM
Methylene chloride	ND	µg/L	NA	1.0		06/03/02	WM
Naphthalene	ND	µg/L	NA	1.0		06/03/02	WM
n-Propylbenzene	ND	µg/L	NA	1.0		06/03/02	WM
Styrene	ND	µg/L	NA	1.0		06/03/02	WM
1,1,1,2-Tetrachloroethane	ND	µg/L	NA	1.0		06/03/02	WM
1,1,2,2-Tetrachloroethane	ND	µg/L	NA	1.0		06/03/02	WM
Tetrachloroethene	ND	µg/L	NA	1.0		06/03/02	WM
Toluene	ND	µg/L	NA	1.0		06/03/02	WM
1,2,3-Trichlorobenzene	ND	µg/L	NA	1.0		06/03/02	WM
1,2,4-Trichlorobenzene	ND	µg/L	NA	1.0		06/03/02	WM
1,1,1-Trichloroethane	ND	µg/L	NA	1.0		06/03/02	WM
1,1,2-Trichloroethane	ND	µg/L	NA	1.0		06/03/02	WM
Trichloroethene	ND	µg/L	NA	1.0		06/03/02	WM
Trichlorofluoromethane	ND	µg/L	NA	1.0		06/03/02	WM
1,2,3-Trichloropropane	ND	µg/L	NA	1.0		06/03/02	WM
1,2,4-Trimethylbenzene	ND	µg/L	NA	1.0		06/03/02	WM
1,3,5-Trimethylbenzene	ND	µg/L	NA	1.0		06/03/02	WM
Vinyl chloride	ND	µg/L	NA	1.0		06/03/02	WM
o-Xylene	ND	µg/L	NA	1.0		06/03/02	WM
m,p-Xylene	ND	µg/L	NA	2.0		06/03/02	WM
Surr: 1,2-Dichloroethane-d4	115	%REC	NA	80-120		06/03/02	WM
Surr: 4-Bromofluorobenzene	99	%REC	NA	86-115		06/03/02	WM
Surr: Dibromofluoromethane	108	%REC	NA	80-120		06/03/02	WM
Surr: Toluene-d8	97	%REC	NA	88-110		06/03/02	WM

Abbreviations:
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MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

Chemical Leaman Tank Lines
WVR000001719
MW-109

REI Consultants Inc.

Date: 24-Jun-02

Client: WV DEP - CHARLESTON
Client Sample ID: DF-5-30-02-3
Project: DF-5-30-02
Site ID:

Lab Order: 0205966
Lab ID: 0205966-03A
Collection Date: 5/30/2002
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
SEMIVOLATILE ORGANIC COMPOUNDS		SW8270C					
Acenaphthene	ND	mg/L	NA	0.011		06/06/02	WP
Acenaphthylene	ND	mg/L	NA	0.011		06/06/02	WP
Anthracene	ND	mg/L	NA	0.011		06/06/02	WP
Benzidine	ND	mg/L	NA	0.011		06/06/02	WP
Benzo(a)anthracene	ND	mg/L	NA	0.011		06/06/02	WP
Benzo(a)pyrene	ND	mg/L	NA	0.011		06/06/02	WP
Benzo(b)fluoranthene	ND	mg/L	NA	0.011		06/06/02	WP
Benzo(g,h,i)perylene	ND	mg/L	NA	0.011		06/06/02	WP
Benzo(k)fluoranthene	ND	mg/L	NA	0.011		06/06/02	WP
Bis(2-chloroethoxy)methane	ND	mg/L	NA	0.011		06/06/02	WP
Bis(2-chloroethyl)ether	ND	mg/L	NA	0.011		06/06/02	WP
Bis(2-chloroisopropyl)ether	ND	mg/L	NA	0.011		06/06/02	WP
Bis(2-ethylhexyl)phthalate	ND	mg/L	NA	0.011		06/06/02	WP
4-Bromophenyl phenyl ether	ND	mg/L	NA	0.011		06/06/02	WP
Butyl benzyl phthalate	ND	mg/L	NA	0.011		06/06/02	WP
4-Chloro-3-methylphenol	ND	mg/L	NA	0.011		06/06/02	WP
2-Chloronaphthalene	ND	mg/L	NA	0.011		06/06/02	WP
2-Chlorophenol	ND	mg/L	NA	0.011		06/06/02	WP
4-Chlorophenyl phenyl ether	ND	mg/L	NA	0.011		06/06/02	WP
Chrysene	ND	mg/L	NA	0.011		06/06/02	WP
o-Cresol	ND	mg/L	NA	0.011		06/06/02	WP
m,p-Cresol	ND	mg/L	NA	0.022		06/06/02	WP
Dibenzo(a,h)anthracene	ND	mg/L	NA	0.011		06/06/02	WP
Di-n-butyl phthalate	ND	mg/L	NA	0.011		06/06/02	WP
1,2-Dichlorobenzene	ND	mg/L	NA	0.011		06/06/02	WP
1,3-Dichlorobenzene	ND	mg/L	NA	0.011		06/06/02	WP
1,4-Dichlorobenzene	ND	mg/L	NA	0.011		06/06/02	WP
3,3'-Dichlorobenzidine	ND	mg/L	NA	0.011		06/06/02	WP
2,4-Dichlorophenol	ND	mg/L	NA	0.011		06/06/02	WP
Diethyl phthalate	0.387	mg/L	NA	0.108		06/15/02	WP
Dimethyl phthalate	0.036	mg/L	NA	0.011		06/06/02	WP
2,4-Dimethylphenol	ND	mg/L	NA	0.011		06/06/02	WP
4,6-Dinitro-2-methylphenol	ND	mg/L	NA	0.011		06/06/02	WP
2,4-Dinitrophenol	ND	mg/L	NA	0.011		06/06/02	WP
2,4-Dinitrotoluene	ND	mg/L	NA	0.011		06/06/02	WP
2,6-Dinitrotoluene	ND	mg/L	NA	0.011		06/06/02	WP
Di-n-octyl phthalate	ND	mg/L	NA	0.011		06/06/02	WP
1,2-Diphenylhydrazine	ND	mg/L	NA	0.011		06/06/02	WP
Fluoranthene	ND	mg/L	NA	0.011		06/06/02	WP
Fluorene	ND	mg/L	NA	0.011		06/06/02	WP

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

REI Consultants Inc.

Date: 24-Jun-02

Client: WV DEP - CHARLESTON
Client Sample ID: DF-5-30-02-3
Project: DF-5-30-02
Site ID:

Lab Order: 0205966
Lab ID: 0205966-03A
Collection Date: 5/30/2002
Matrix: LIQUID

Analyses	Result	Units	MDL	PQL	Qual	Date Analyzed	Analyst
Hexachlorobenzene	ND	mg/L	NA	0.011		06/06/02	WP
Hexachlorobutadiene	ND	mg/L	NA	0.011		06/06/02	WP
Hexachlorocyclopentadiene	ND	mg/L	NA	0.011		06/06/02	WP
Hexachloroethane	ND	mg/L	NA	0.011		06/06/02	WP
Indeno(1,2,3-cd)pyrene	ND	mg/L	NA	0.011		06/06/02	WP
Isophorone	ND	mg/L	NA	0.011		06/06/02	WP
Naphthalene	ND	mg/L	NA	0.011		06/06/02	WP
Nitrobenzene	ND	mg/L	NA	0.011		06/06/02	WP
2-Nitrophenol	ND	mg/L	NA	0.011		06/06/02	WP
4-Nitrophenol	ND	mg/L	NA	0.011		06/06/02	WP
N-Nitrosodimethylamine	ND	mg/L	NA	0.011		06/06/02	WP
N-Nitrosodiphenylamine	ND	mg/L	NA	0.011		06/06/02	WP
N-Nitrosodi-n-propylamine	ND	mg/L	NA	0.011		06/06/02	WP
Pentachlorophenol	ND	mg/L	NA	0.011		06/06/02	WP
Phenanthrene	ND	mg/L	NA	0.011		06/06/02	WP
Phenol	ND	mg/L	NA	0.011		06/06/02	WP
Pyrene	ND	mg/L	NA	0.011		06/06/02	WP
1,2,4-Trichlorobenzene	ND	mg/L	NA	0.011		06/06/02	WP
2,4,5-Trichlorophenol	ND	mg/L	NA	0.011		06/06/02	WP
2,4,6-Trichlorophenol	ND	mg/L	NA	0.011		06/06/02	WP
Surr: 2,4,6-Tribromophenol	62	%REC	NA	10-123		06/06/02	WP
Surr: 2-Fluorobiphenyl	75	%REC	NA	43-116		06/06/02	WP
Surr: 2-Fluorophenol	27	%REC	NA	21-100		06/06/02	WP
Surr: 4-Terphenyl-d14	96	%REC	NA	33-141		06/06/02	WP
Surr: Nitrobenzene-d5	85	%REC	NA	35-114		06/06/02	WP
Surr: Phenol-d5	23	%REC	NA	10-110		06/06/02	WP

Chemical Leaman Tank Lines
WVR000001719
MW-109

Abbreviations:
ND - Not Detected at the PQL or MDL
PQL - Practical Quantitation Limit
MDL - Minimum Detection Limit
NA - Not Applicable

Qualifiers:
J - Analyte detected below PQL
S - Spike Recovery outside accepted recovery limits
E - Value above quantitation range
* - Value exceeds Maximum Contaminant Level

Division of Waste Management
1356 Hansford Street
Charleston, West Virginia 25301
Telephone Number (304) 558-5393
Fax Number (304) 558-0256

West Virginia Department of Environmental Protection

Bob Wise
Governor

Michael O. Callaghan
Secretary

February 6, 2002

Mr. James A. Rakitsky, Vice President
Environmental Services
Quality Distribution, Incorporated
150 E. Pennsylvania Avenue, Suite 125
Downingtown, Pennsylvania 19335

Re: Chemical Leaman Tank Lines, Inc.
Permit Number: WVR000001719

Subject: Class 3 Permit Modification

Dear Mr. Rakitsky:

The West Virginia Department of Environmental Protection, Division of Waste Management (DWM) did not receive any comments on your request for the Class 3 permit modification that you sent to public notice on August 23, 2001.

The request was triggered by the groundwater monitoring data and permit condition IV-C-4-dii requiring the Permittee to submit a permit modification to establish a corrective action program meeting the criteria of 40 CFR §264.100.

Monitored natural attenuation (MNA) was the correction proposed along with a set of alternate concentration limits (ACL's) based on a human health risk assessment identifying the health risk as inhalation of outdoor air. The risk assessment listed no potable water supply wells located within 2,500 feet of the facility, ruling out the health risk associated with the ingestion route. To protect future on-site receptors from exposure via the ingestion route, the Permittee proposed a deed restriction prohibiting the installation of potable water supply wells.

The DWM has considered your request for MNA and reviewed the submittal against the US EPA guidance documents, OSWER Directive 9200.4-17P, April 21, 1999 and EPA/530/R-01/015 September 2001 supporting the corrective action of 40 CFR 264.100.

Based on the review, your request for a permit modification making MNA as the sole remedy cannot be allowed based on the following:

1) On page 28 of the submittal, basis for selecting MNA over the three other corrective action options were listed. The second item, "All source material has been removed, resulting in generally stable or declining COC concentrations within the on-site plume." There are agency concerns that all buried drums containing waste may have not all been removed during the 1995 excavation and the groundwater monitoring data generated to date has been limited to the on-site plume. The full extent of plume migration remains undefined.
2) On page 31 of the submittal, the last item under basis "The West Virginia Groundwater Protection Standards are currently being met at the downgradient property boundary (compliance point). Therefore, active corrective action is not necessary." DWM does not concur with these statements. The submitted groundwater data reveals that two of the wells nearest to property boundary, MW108 and MW109 have exceeded the WV groundwater protection standard of 100 microgram per liter for the hazardous constituent chlorobenzene. The permit makes no distinction between the downgradient wells located near property line and those located nearer to source material as to compliance point and concentration limits.
3) The data submitted to date fails to measure up to the data specified in the above referenced guidance documents for determining if the total plume, not just the onsite portion, is stable or shrinking; or for determining an attenuation rate constant in order to project a time frame for the MNA. DWM believes that the uncertainties are too great to allow the use of MNA as a stand alone remedy for this site.

Within sixty (60) days of receiving this letter, please submit a revision to the corrective action plan which meets the criteria of the above referenced guidance documents.

In accordance with Section 11.9.b of the Hazardous Waste Management Rule (HWMR) the denial of your request for the Class 3 permit modification is not subject to public notice, comment or hearings. The decision for denial may be appealed to the Environmental Quality Board in accordance with Section 15 of the HWMR.

If you have any questions, please feel free to contact Mr. John Janicki, of my staff, at (304) 558-5393.

Sincerely,

Ken Ellison

Ken Ellison, Director
Division of Waste Management

KE:jja

C: Sharon McCauley, US EPA Region III
Roy Peterson, Quality Distribution
H. Michael Dorsey, CAER
James Duranti, HWPU
W. John Janicki, HWPU
Christopher Gates, CAER
David Farley, CAER, Inspector

QUALITY DISTRIBUTION

Via Air Borne Express

March 8, 2000

West Virginia Division of Environmental Protection
Office of Waste Management
ATTN: H. Michael Dorsey, Assistant Chief
Compliance Assurance and Emergency Response
1356 Hansford Street
Charleston, WV 25301

RE: Chemical Leaman Tank Lines, Inc. (CLTL)
EPA ID Number WVR000001719
Request for Class 2 Permit Modification

Dear Mr. Dorsey:

This is to submit copies of the letters mailed to "all persons on the chief's mailing list", proof of mailing, and Affidavit of Publication of the Notice in the local newspaper, as required in your letter dated February 18, 2000. Please note that the enclosed list of "all persons on the chief's mailing list" was not received until March 7, 2000.

Should you have any questions, please call Roy Peterson, or me, at 610-363-4498.

Very truly yours,

QUALITY DISTRIBUTION, INC.

Donald K. Emig, Ph.D., P.E.
Vice President, Environmental Projects

Enclosures

cc: R. Greaves, US EPA Region III (w/o encl.)
S. McCauley, US EPA Region III (w/o encl.)
J. Janicki (w/encl.)
D. Cunningham, Inspector, OWM CAER (w/o encl.)

Office of Waste Management
1356 Hansford Street
Charleston, WV 25301
(304) 558-5393
Fax (304) 558-0256

West Virginia Division of Environmental Protection

Cecil H. Underwood
Governor

Michael C. Castle
Director

February 18, 2000

Mr. Roy Peterson
Chemical Leaman Tank Lines, Inc.
102 Pickering Way
Exton, Pennsylvania 19341

Re: Chemical Leaman Tank Lines, Inc. (CLTL)
EPA ID Number WVR000001719

Subject: Class 2 Permit Modification

Dear Mr. Peterson:

On this date, the Division of Environmental Protection, Office of Waste Management (OWM), has received your request for a Class 2 Permit Modification for the above referenced facility. This modification will allow CLTL to install four (4) additional groundwater monitoring wells and revise the proposed layout of the security fence.

Please note that pursuant to 40 CFR §270.42(b)(2), incorporated, by reference, into the West Virginia Hazardous Waste Management Rule (Title 33, Series 20), notice must be sent to all persons on the chief's mailing list. Mailing labels for this list are included for your convenience. Proof of mailing and publication must be submitted to OWM within thirty (30) days of that notification.

If you should have any questions, please feel free to call Mr. John Janicki, of my staff, at the numbers listed above.

Sincerely,

H. Michael Dorsey, Assistant Chief
Compliance Assurance and Emergency Response

HMD:jja

Enclosure

c: Robert Greaves, US EPA Region III
Sharon McCauley, US EPA Region III
John Janicki, OWM
Dave Cunningham, Inspector, OWM CAER

QUALITY DISTRIBUTION

Via Fax (304-558-0256) and Via U.S. Mail, Certificate of Mailing Obtained

December 21, 1999

State of West Virginia
Division of Environmental Protection
ATTN: B. F. Smith, P.E., Chief
Office of Waste Management
Hazardous Waste Management Section
1356 Hansford Street
Charleston, WV 25301-1401

RE: Chemical Leaman Tank Lines, Inc.
State Route 25, Institute, WV (304-722-1400)
EPA ID No.: WVR 000 001 719
Post-Closure Care Permit
Response to November 29, 1999 NOV

Dear Mr. Smith:

This is to respond to the November 29, 1999 Notice of Violation (NOV) related to the Post-Closure Care permit at our trucking terminal in Institute, WV. Christopher Gatens and David Cunningham of your office inspected our facility on October 18, 1999 and found three violations, which are listed below along with our responses.

1. Reseed the cap on the treated soil stockpile and establish a vegetative cover to prevent erosion to the surface.

Response: The head of the new stormwater diversion ditch was regraded to eliminate the identified depressed area, and this area and the treated soil stockpile were reseeded in late October, 1999. These areas will be monitored during future internal inspections with additional improvements made as necessary.

2. Redevelop all of the monitoring wells to remove the sediment content in order to provide samples that are representative of the groundwater conditions at the site.

Response: The monitoring wells were redeveloped on December 9, 1999 using both pumping and hand bailing/surging methods. The monitoring wells are screened within a formation that is composed of very fine-grained silty clay sediments with low

groundwater yields. Therefore, the presence of suspended sediment within the groundwater is not unexpected. During the redevelopment of the monitoring wells, suspended sediment was observed throughout the entire groundwater column in several of the monitoring wells. This demonstrates that the sediment size is so small that it passes through the filter pack and is remaining in suspension and not settling to the base of the well, as would be expected in a non-developed well. We understand that monitoring at neighboring sites has also identified this problem. For your information, our next quarterly sampling round is scheduled for December 27, 1999.

3. The flush mounted monitoring wells must be numbered and all of the monitoring wells must be tagged with the well registration number.

Response: An engraver was used to etch the monitoring well identification numbers into the flush mount steel covers. The West Virginia registered driller (Southeastern Environmental Services) which installed the monitoring wells is in the process of obtaining the well registration numbers and is expected to have the wells tagged by the end of 1999. We will notify you upon the completion of the labeling by the driller.

We believe these responses document our remedial actions and compliance with the NOV issues. Please provide written verification of our compliance as soon as possible. If you have any questions, please contact Roy Peterson, or me, at 610-363-4498.

Very truly yours,

QUALITY DISTRIBUTION, INC.

Donald K. Emig, Ph.D., P.E.
Vice President, Environmental Projects

cc: Thomas Fisher, WVDEP OWM
H. Michael Dorsey, WVDEP OWM Compliance
John Janicki, WVDEP OWM
R. Kasak, QDI
Marc Reeves, SAIC

Office of Waste Management
1356 Hansford Street
Charleston, WV 25301
Telephone: (304) 558-5393
Fax: (304) 558-0256

West Virginia Division of Environmental Protection

Cecil H. Underwood
Governor

Michael P. Miano
Director

April 29, 1999

CERTIFIED MAIL
RETURN RECEIPT REQUESTED
Z 316 375 805

Mr. Roy Peterson
Enviropower, Inc.
102 Pickering Way
Exton, PA 19341-0200

RE: Chemical Leaman Tank Lines, Inc.
EPA ID No: WVR000001719

SUBJECT: Draft Permit

Dear Mr. Peterson:

Enclosed, please find a copy of the following: 1) Public Notice, 2) Fact Sheet, and 3) Draft Permit for Chemical Leaman Tank Lines, Inc.

The legal advertisement is scheduled to be published in the Charleston Gazette and Charleston Daily Mail on Wednesday, May 5, 1999. The thirty second (:30) radio announcement will be broadcast on the same day by both WQBE-FM and WCHS-AM during both the morning and evening drive times (four announcements).

The forty-five (45) day public review/comment period will last until Friday, June 18, 1999.

Should you have any questions or concerns, please feel free to contact me at the numbers provided on this letter.

Sincerely,

W. John Janicki, Permit Writer
Hazardous Waste Management Section
Office of Waste Management

WJJ:cm
Enclosures

c: Robert Greaves, US EPA Region III(cover w/attachments)
Sharon McCauley, US EPA Region III (cover letter only)
G. S. Atwal, OWM Permitting (cover letter via e-mail)
Barbara Taylor, OWR (cover w/attachments)
Hank Haas, OWM CAER (cover w/all attachments)
Lucy Pontiveros, OAQ (cover w/all attachments)
Ira Baldwin, PSC (cover letter only)
Joseph Wyatt, HHR (cover letter only)
Jim Youngblood (cover letter only)

WEST VIRGINIA DIVISION OF ENVIRONMENTAL PROTECTION
PUBLIC INFORMATION OFFICE
1356 HANSFORD STREET
CHARLESTON, WEST VIRGINIA 25301
TELEPHONE: (304) 558-4253 OR TDD Numbers
(800) 422-5700 or 558-1236

PUBLIC NOTICE OF THE INTENT TO ISSUE A PERMIT FOR POST-CLOSURE CARE UNDER THE WEST VIRGINIA HAZARDOUS WASTE MANAGEMENT ACT

PUBLIC NOTICE NO: HW9903 **PAPER: Charleston Gazette**
PUBLIC NOTICE DATE: May 5, 1999 **Charleston Daily Mail**

The West Virginia Division of Environmental Protection (DEP), Office of Waste Management (OWM), intends to issue a permit as a condition of Hazardous Waste Consent Order #HW-533-96 to Chemical Leaman Tank Lines, Incorporated. The facility is located in Kanawha County along West Virginia State Route 25 between Nitro and Institute. The permit addresses post-closure care and associated groundwater monitoring activities. This permit will be issued under the authority of W.Va. Code, Chapter 22, Article 18. The facility has been assigned EPA Identification number WVR000001719.

A condition of Consent Order #HW533-96 requires Chemical Leaman to have a permit for the monitoring of areas within the facility that may have been contaminated by hazardous chemical compound releases originating from on-site waste disposal and subsequent waste material removal. Disposal occurred before Resource Conservation and Recovery Act (RCRA) passage. Remedial actions previously performed at the site include: (1) drum excavation, (2) on-site treatment of soils generated during excavation and (3) on-site placement of treated soils which tested below federal land disposal restrictions.

State law requires the OWM to provide the public with an opportunity to participate in the permitting process (public notice and opportunity to request a public hearing).

A copy of the administrative record, including the permit application, draft permit, and fact sheet will be available for review at the Division of Environmental Protection, Public Information Office in Charleston (address provided below). During the designated 45-day public comment period, persons wanting to review the aforementioned information should contact Jim Waycaster, (304) 558-4253 to scheduled an appointment. Any person desiring site-specific or technical information should contact W. John Janicki, Permit Writer, at the Charleston address or call (304) 558-5393. Permit Conditions are tentative and open to public comment. Persons wishing to comment on the draft permit must submit their comments in writing to:

Chief, Office of Waste Management
Public Information Office
1356 Hansford Street
Charleston, West Virginia 25301
Attention: James N. Waycaster, Public Information Specialist

Relevant written comments received during this forty-five (45) day comment period, on or before 4:00 p.m., Friday, June 18, 1998, will be considered in the final permitting decision. Persons desiring a public hearing should send their written request, stating the nature of the issue(s), to the Chief, OWM, during the comment/review period. If a public hearing is warranted, the Chief will provide the public with a notice of at least thirty (30) days prior to the scheduled hearing.

If the terms and conditions of the permit remain substantially unchanged from those announced by this notice, the Chief will notify all persons who commented. If the terms and conditions are substantially changed, the Chief will offer the public an opportunity for review and comment on substantial changes before the final permitting decision.

:30 second announcement

The Division of Environmental Protection, Office of Waste Management, intends to issue a post-closure care permit to Chemical Leaman Tank Lines, Incorporated for establishing an on-site groundwater monitoring program. The facility is located on West Virginia Route 25, between Nitro and Institute.

Comments will be accepted until 4:00 p.m., Friday, June 18, 1999. This draft permit may be reviewed by contacting Mr. Jim Waycaster, at the Office of Waste Management located at 1356 Hansford Street, Charleston, WV, (304) 558-4253.

FACT SHEET
for
CHEMICAL LEAMAN TANK LINES, INC.
EPA ID NUMBER: WVR000001719

PERMIT FOR POST-CLOSURE CARE

I. OVERVIEW

This fact sheet, prepared by the West Virginia Division of Environmental Protection, Office of Waste Management (OWM), in support of and accompanying the draft permit, for Chemical Leaman Tank Lines, Inc., (Permittee), located in Kanawha County along WVa. State Route 25, between Nitro and Institute, was prepared in accordance with Section 11.6 of the Hazardous Waste Management Rule (HWMR).

The OWM intends to issue a Permit as a condition of Hazardous Waste Consent Order #HW-533-96 which will bind the Permittee to perform post-closure care and the associated groundwater monitoring for those areas of the facility which may have been effected by releases of hazardous constituents originating from pre-RCRA (Resource Conservation Recovery Act) waste disposal and RCRA remedial activities conducted at the site. These RCRA remedial activities consisted of; 1) excavation of buried drums containing waste, 2) On-site treatment of the lesser contaminated soils which were generated during excavation, and 3) On-site placement of the treated soils which were below the land disposal restrictions expressed in 40 CFR 268 for the hazardous constituents present.

II. AUTHORITY

(a) Federal Law:

The United States Environmental Protection Agency (EPA), under Section 3006(b) of the Resource Conservation and Recovery Act of 1976 (RCRA), has authorized the State of West Virginia to administer and enforce a hazardous waste program, which excludes some provisions of the Hazardous and Solid Waste Amendments of 1984 (HSWA) in lieu of the federal program under RCRA. EPA will continue to administer and enforce those excluded provisions of HSWA until the state receives full RCRA authorization.

(b) State Law:

Article 18, Chapter 22 of the West Virginia Code, Hazardous Waste Management Act, hereinafter referred to as the "ACT", designates the Division of Environmental Protection (DEP) as the State lead regulatory agency for hazardous waste management and section 7(6), Article 1, Chapter 22 of the State Code charges the OWM with administering and enforcing, under the supervision of the director, DEP, the provisions of the ACT.

III. PURPOSE OF PERMITTING PROCESS

The permitting process provides an opportunity for the public, OWM, and other agencies to evaluate the Permittee's ability and commitments to comply with the ACT and the rules promulgated thereunder.

Section 11.5 of the HWMR requires the OWM to prepare a draft permit which sets forth, in one concise legal document, all the applicable requirements that the Permittee must comply with during the ten year duration of the permit.

IV. PROCEDURES FOR REACHING A FINAL DECISION

(a) Pursuant to Section 11.8.b of the HWMR, the public and other agencies are given forty-five (45) days to review and comment on the Administrative Record which consists of the application, fact sheet, draft permit, and other documents contained in the supporting file for the draft permit. A copy of these documents will be available for public review at the DEP, OWM, 1356 Hansford Street, Charleston, WV.

The comment period will begin on May 5, 1999, and will end on June 18, 1999. All relevant comments should be submitted in writing to the attention of James Waycaster, OWM, Public Information Office, 1356 Hansford St., Charleston, WV 25301.

(b) If, during this forty-five (45) day comment period, the Chief, OWM, finds sufficient public interest or if he receives a written notice of opposition to the draft permit and a request for a public hearing, a public hearing will be held. A Public Notice of the hearing shall be given thirty (30) days before the scheduled hearing. The hearing shall be scheduled at a location convenient to the residents of Nitro and Institute, West Virginia.

Any person requesting a public hearing should include all reasonably available arguments, factual grounds, and supporting material. The requests for a hearing should be addressed to: Chief, OWM, 1356 Hansford Street, Charleston, WV 25301.

(c) The Chief will consider the following in the permitting decision: 1) relevant written comments received during the comment period, 2) relevant oral or written statements received during the public hearing (if held), 3) regulatory requirements of the HWMR and, 4) OWM permitting policies.

(d) At the time that the final permit is issued, the Chief shall respond to all comments received. The response will briefly describe and address all significant comments raised during the public comment period or during the public hearing. The response to comments will also specify which provisions, if any, of the draft permit have been changed and the reasons for the change. The response to comments shall be sent to any person who requested the response.

Any person aggrieved or adversely affected by the action of the Chief concerning the permit has the right of appeal as provided under Section 20 of the ACT.

The permit shall become effective immediately upon issuance by the Chief.

The agency contact person for this permit is W. John Janicki, WV Division of Environmental Protection, OWM, 1356 Hansford Street, Charleston, WV 25301, (304) 558-5393 or TDD Numbers (800) 422-5700 or 558-1236.

V. FACILITY DESCRIPTION

Chemical Leaman Tank Lines, Inc. (CLTL) began trucking related operations at this location on the northern side of State Route 25 across the highway from Rhone-Poulenc wastewater treatment plant in 1961 and continues to operate a trucking and tanker wash rack. The trucking related operations at this location currently employs 62 people which include both drivers domiciled at this terminal and employees working day, evening, and night shifts for Montgomery Tank Lines and Quala Systems, Inc., companies affiliated with CLTL.

The remediation and the associated area of the facility were assigned a new EPA ID Number, WVR000001719, to cover the hazardous waste generation and the subsequent on-site treatment activities allowed under the emergency permits. The original site EPA ID Number, WVD000495655, was adopted by Quala System, Inc., for the hazardous waste generated from their tank truck cleaning operations at this location.

VI. FACILITY STATUS

Past hazardous waste management activities conducted at this location by CLTL have been accomplished outside of the interim status provisions of Section 11 of the ACT, and were subject only to the less stringent generator rules of RCRA. With the issuance of a permit for post-closure care, the status of CLTL will change to a TSD facility, subject to the more stringent TSD Rules of RCRA.

VII. BASIS FOR PERMIT ISSUANCE

In 1994, the Division of Environmental Protection, Office of Water Resources inspectors, acting under the authority of Article 12, Chapter 22, of the W.Va. Code (Groundwater Protection Act) negotiated a verbal agreement with CLTL, who at that time needed a permit to discharge from their wastewater treatment plant, to conduct a site investigation of two (2) specific areas of the facility which the inspectors believed contained buried wastes. These beliefs were based on information provided to the inspectors by several former CLTL employees.

Pursuant to a long standing EPA RCRA regulatory policy, the excavation of any waste meeting the characteristics or listing of hazardous waste, regardless of date of disposal, subjects that excavator to the generator rules of RCRA; which, in W.Va. are administered and enforced by the OWM.

The investigations in 1994 and early 1995, by Vector Enterprises, Inc., the consultant acting on behalf of CLTL, through an EM survey and soil gas sampling failed to reveal any burial of drums or gross contamination in the area north of the terminal building adjacent to the wastewater treatment plant. By the agency's approval of the consultants July, 1995 site remediation plan, the OWM knowingly or unknowingly accepted the CLTL recommendation of "no further action" for this area. Although not triggering the need for remediation, groundwater samples taken from piezometers in this area of "no further action" did reveal elevated levels of the hazardous constituent lead.

These investigations did ear-mark the area east of the terminal building for remediation. The OWM accepted the CLTL estimate of only 30 to 40 drums containing waste from tanker trucks being buried in this area east of the building.

The remediation of the area to the east of the terminal building began in the late summer of 1995 under a plan approved by the OWM which had under estimated the magnitude of the project. The excavation yielded approximately 490 drums of which

163 had already leaked their contents or were ruptured during the excavation resulting in almost 9000 gallons of waste being released into this 0.10 acre area. These unplanned for occurrences resulted in more than 2200 cubic yards of contaminated soil being excavated. Depth of some of the excavations approached groundwater and the OWM believes that not all hazardous constituents from the 9000 gallon release were recovered by the excavation.

The OWM, Hazardous Waste Management Section, through issuance of emergency permits of limited duration, allowed CLTL on-site treatment of the lesser contaminated soils that the OWM and CLTL contractor believed to be amenable to treatment in eight bio-remediation cells. During this period of operation, under two consecutive emergency permits, September, 1995 through January, 1996, the project didn't go well. The contractor performing the remediation for CLTL had to make major changes to the remedial plan and both the remedial plan and the emergency permits failed to take into consideration the retarded rate for bio-remediation during winter. In January, 1996, the contractor had financial difficulties and was unable to complete the remediation.

Following expiration of the second emergency permit and lacking any formal mechanism such as a unilateral or consent order to bind CLTL to the verbal commitment of completing the remediation, the site fell into limbo. On August 14, 1996, an inspection of the facility by OWM inspectors revealed numerous releases of hazardous constituents were occurring or had occurred from the un-attended bio-remediation cells. This site inspection triggered Consent Order Number HW-533-96 which was finalized on March 6, 1997. The Order included provisions for: 1) The OWM to issue a third emergency permit allowing CLTL follow-up treatment of the partially remediated soils, and 2) allowing CLTL to keep, on-site, those soils which were treated to an acceptable level (meeting the land disposal restrictions of 40 CFR 268).

Also in this Consent Order, CLTL agreed to be permitted for post-closure care and the associated groundwater monitoring for those areas of the facility which may have been effected by releases of hazardous constituents resulting from; 1) the uncontained portion of the 9000 gallon release in the area of drum excavation, 2) two-year duration of the bio-remediation cells, and 3) approximately 2200 cubic yards of treated soils which have been allowed to remain on-site.

VIII. PERMIT ORGANIZATION

The permit is divided into modules as outlined:

Module I; Standard Conditions
Module II; General Facility Conditions
Module III; Post-Closure Care
Module IV; Groundwater Monitoring Program; and
Attachments 1 through 5, incorporated from the permit application.

Modules I and II for this permit covering only post-closure care and the associated groundwater monitoring are revised versions of Modules I and II of permits for operating TSD facilities. These two modules set forth the standard and general conditions that the OWM believes to be applicable for non-operating facilities.

Modules III and IV and the Attachments incorporated from CLTL's permit application, pertain specifically to the RCRA Post-Closure Care activities to be conducted at this location.

The Attachments compiled from the permit application which are part of the permit, include: 1) Inspection Schedule, 2) Training Plan, 3) Contingency Plan, 4) Groundwater Monitoring Plan, and 5) Post-Closure Plan.

IX BASIS FOR PERMIT CONDITIONS

(a) Module I

Module I of the permit is standard for all permitted treatment, storage, and disposal (TSD) facilities. This particular version of Module I, for a non-operating TSD, is a revised edition of Module I for operating permits and includes only those conditions that OWM believes to be applicable. These Standard Conditions are required by 40 CFR 270, Subpart C and are supported by the regulatory and/or statutory reference cited in the permit.

(b) Module II

As in Module I, above, the OWM has made revisions to Module II, General Facility Conditions, for operating TSD permits to adapt the Module to cover only the general facility conditions for post-closure care and the associated groundwater monitoring in which the OWM believes to be applicable. In Module II of the permit, most conditions are a direct citation of a regulatory and/or statutory requirement. An exception being in permit condition II-C-3(b) and (c), the OWM as a permitting policy, has specified fifteen (15) days following an inspection for completion of remedial activity or submittal of a plan for agency approval. The OWM believes the federal rule under 40 CFR 264.15(c), requiring remediation "on a schedule which ensures that the problem does not lead to an environmental or human health hazard" is a little vague and needs further support.

(c) Module III

In preparing Module III, Post-Closure Care, the OWM, because of the areas being permitted were not a perfect fit with any of the conventional RCRA land disposal units (landfill, waste pile, surface impoundment, and land treatment), used regulatory provisions which are based on 40 CFR 264, subparts K through N, for permit conditions addressing the procedures for the stock-pile area to minimize the threat to human health and the environment (vegetative cover, run-on control, and run-off measures).

The initial permit application, as submitted, lacked provisions for run-on control for the stock pile area. This inadequacy is being addressed in a schedule of compliance contained in the permit allowing ninety (90) days for installation of run-on control in accordance with a late date revision to the permit application.

Other parts of Module III, length of post-closure period, frequency of inspection, and permit modification, are supported by regulatory reference or as in the case of frequency of inspection, a commitment in the permit application.

(d) Module IV

Module IV, addressing monitoring well installation and groundwater monitoring for the area of the facility east of the terminal building bordering W.Va. State Route 25, is supported by the HWMR, 40 CFR 264, Subpart F, 40 CFR 270, and the state rules promulgated under the Ground Water Protection Act.

Because no groundwater data presently exists for this area, the OWM, in preparing Module IV, Groundwater Monitoring, incorporated provisions from both 40 CFR §264.98 (Detection Monitoring Program) and §264.99 (Compliance Monitoring Program) in an attempt to cover contingencies and minimize the need for future permit modifications to adequately cover the groundwater monitoring program. The OWM has included a provision in the schedule of compliance covering the installation of monitoring wells for the additional contingent submittal of an application for permit modification to cover corrective action for the permitted area if groundwater data evaluation triggers the need.

In determining the compliance period (40 CFR 264.96(a)) of a five-year duration, under permit condition IV-C-1-b, the OWM's logic was based on the period of OWM evolvement in site remediation (1994 through 1998) as being the active life of the waste management area, assuming the groundwater monitoring program has been implemented by September, 1999.

The module also contains requirements which CLTL has made no commitments for in the permit application. The OWM believes that the constituent lead must be monitored based on groundwater sampling in the area north of the terminal building submitted in the 1995 Vector Site Remediation Plan. The permit also requires monitoring for the indicator parameters conductivity, pH and TOC.

The OWM believes that these indicator parameters will provide usable data and provide more support for data quality assurance, quality control (QA/QC) especially when hazardous constituent parameters of each well are analyzed only twice per year following the accelerated data gathering schedule which the OWM has placed in the permit. These schedules also differ from what CLTL has committed to in the permit application. The schedules which CLTL proposed in the permit application of annual sampling following the initial data gathering period of eight consecutive quarters does not meet the minimum regulatory requirement of semi-annual sampling frequency specified in the detection and compliance monitoring programs of 40 CFR 264, Subpart F, and the annual frequency as proposed cannot be allowed.

WEST VIRGINIA DIVISION OF ENVIRONMENTAL PROTECTION
OFFICE OF WASTE MANAGEMENT
PERMIT *for* POST-CLOSURE CARE

Permittee: Chemical Leaman Tank Lines, Inc.
102 Pickering Way
Exton, PA 19341-0200

Permit Number: WVR000001719
EPA ID No: WVR000001719

Under the authority of the Hazardous Waste Management Act (Article 18, Chapter 22, of the West Virginia Code), hereinafter called the "Act", this permit for post-closure care is being issued as a condition of Hazardous Waste Consent Order #HW 533-96 by the Division of Environmental Protection, Office of Waste Management (OWM), to Chemical Leaman Tank Lines, Inc., hereinafter called the "Permittee", for the facility located in Kanawha County, along State Route 25, between Nitro and Institute, West Virginia, at latitude 38° 23' 17" N and longitude 81° 47' 40" W.

This permit, issued pursuant to Section 11 of the Hazardous Waste Management Rule (HWMR), Title 33, Series 20, promulgated under the Act, binds the Permittee to post-closure care and the associated groundwater monitoring for those areas of the facility which may have been effected by releases of hazardous constituents originating from the pre-RCRA (Resource Conservation Recovery Act) waste disposal and RCRA remedial activities conducted at the site.

The Permittee must comply with all terms and conditions of this permit and the applicable regulations. This permit consists of the conditions contained herein (including those in any and all attachments) and the applicable provisions of HWMR and regulations contained in 40 CFR, Parts 260, 261, 262, 264, 266, 268, and 270, which have been incorporated, by reference, into the HWMR, and applicable provisions of the Act.

This permit is based on information submitted in the permit application (hereinafter referred to as the "Application"), received on April 20, and June 23, 1998, and subsequent revisions on January 19, 1999. Any inaccuracies found in this information or violations of terms or conditions of this permit may be grounds for the termination, revocation and reissuance, or modification of this permit and enforcement action. The Permittee must inform the OWM, by means of written notification to the Chief, OWM, of any deviation from or changes in the submitted information which would affect the Permittee's ability to comply with the applicable statues, rules, regulations, or permit conditions.

This permit is effective as of _____, 1999, and shall expire on _____, 2009, unless suspended, revoked, revoked and reissued, or terminated (40 CFR 270.41, 270.43) or continued in accordance with 40 CFR 270.51.

_____
B. F. Smith, P.E.
Chief
Office of Waste Management

_____
Date Signed

Hazardous Waste Management Section, Office of Waste Management
Telephone: (304) 558-5393 TDD: (800) 422-5700 FAX: (304) 558-0256

MODULE I
STANDARD CONDITIONS

Module I of the permit sets forth the standard conditions that are applicable to all Permittees. The regulations applicable to permitting, Parts 260 through 264, 266, 268, and 270, of Title 40, Code of Federal Regulations, have been incorporated by reference into Sections 2 through 7 and 9 through 11, respectively, of the State Legislative Rules, Title 33, Series 20, West Virginia Hazardous Waste Management Rule (HWMR).

(NOTE: The regulatory and/or statutory citations in parentheses are incorporated into the permit by reference.)

I-A EFFECT OF PERMIT (40 CFR §§270.30(g), 270.4 and Section 8(a) of the Act)

Compliance with this permit during its term constitutes compliance, for purposes of enforcement, with the Hazardous Waste Management Act (Article 18, Chapter 22 of the West Virginia Code), (hereinafter, the ACT), except for those requirements not included in the permit which become effective by statute, or which are promulgated under 40 CFR Part 268, restricting the placement of hazardous waste in, or on, the land. Issuance of this permit does not convey property rights of any sort or any exclusive privilege; nor does it authorize any injury to persons or property, any invasion of other private rights, or any infringement of State or local law or regulations. Compliance with the terms of this permit does not constitute a defense to any order issued or any action brought by the U. S. Environmental Protection Agency (US EPA) under Sections 3008(a), 3008(h), 3013, or 7003 of RCRA; Sections 104, 106(a), or 107, of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (42 U.S.C. §9601 et. seq., commonly known as CERCLA); or any other law providing for protection of public health or the environment.

I-B PERMIT ACTIONS (40 CFR §270.30(f))

This permit may be modified, revoked and reissued, or terminated for cause, as specified in 40 CFR §§270.41, 270.42, and 270.43. This permit may also be reviewed and modified by the West Virginia Division of Environmental Protection (WV DEP), consistent with 40 CFR §270.41, to include any terms and conditions determined necessary to protect human health and the environment, and to achieve compliance with §270.32(b)(2). The filing of a request for a permit modification, revocation and reissuance, or termination, or the notification of planned changes, or anticipated noncompliance on the part of the Permittee does not stay the applicability or enforceability of any permit condition. The Permittee shall not perform any construction associated with a Class 3 permit modification request until such request is granted and the modification becomes effective.

I-C SEVERABILITY

The provisions of this permit are severable, and if any provision of this permit, or if the application of any provision of this permit, to any circumstance, is held invalid, the application of such provision to other circumstances and the remainder of this permit shall not be affected thereby.

I-D DEFINITIONS

For the purpose of this Permit, terms used herein shall have the same meaning as those set forth in the Act, HWMR, and 40 CFR Parts 260 through 264, 266, 268, 270, and 279, which have been incorporated into the HWMR by reference, unless this permit specifically states otherwise. Where terms are not otherwise defined, the meaning associated with such terms shall be as defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term. The following definitions also apply to this permit.

D-1 "Chief" means the Chief of the Office of Waste Management, Division of Environmental Protection;

D-2 "Days" mean except as otherwise provided herein, calendar days;

D-3 "Hazardous Constituent" means any constituent identified in Appendix VIII of 40 CFR Part 261, or any constituent identified in Appendix IX of 40 CFR Part 264;

D-4 "Release" means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment.

I-E FAILURE TO SUBMIT RELEVANT AND/OR ACCURATE INFORMATION

Whenever the Permittee becomes aware that it failed to submit any relevant facts in the permit application, or submitted incorrect information in a permit application or in any report to the Chief, Office of Waste Management (OWM), the Permittee shall notify the Chief of such failure within seven (7) calendar days of becoming aware of such deficiency or inaccuracy. The Permittee shall submit the correct or additional information to the Chief within fourteen (14) days of becoming aware of the deficiency or inaccuracy (40 CFR, §270.30(l)(11)). Failure to submit the information required in this permit or misrepresentation of any submitted information is grounds for termination of this permit (40 CFR, §270.43).

I-F DUTIES AND REQUIREMENTS

F-1 Duty to Comply (40 CFR §270.30(a))

The Permittee must comply with all conditions of this permit, except that the Permittee need not comply with the conditions of this permit to the extent and for the duration such noncompliance is authorized in an emergency permit. (See 40 CFR §270.61). Any permit noncompliance, except under the terms of an emergency permit, constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

F-2 Duty to Re-apply (40 CFR §§270.30(b) and 270.10(h))

The Permittee shall submit a complete application for a new permit at least one hundred-eighty (180) days before this permit expires unless: a) the Permittee is no longer required to have a RCRA Post-Closure Care Permit; b) permission for a later date has been granted by the Chief. The Chief, shall not grant permission for applications to be submitted later than the expiration date of the existing permit.

F-3 Permit Expiration (40 CFR §§270.13, 270.14 through 270.29, 270.50, and 270.51)

This permit and all conditions herein shall be effective for a fixed term not to exceed ten (10) years, and will remain in effect beyond the permit's expiration date only if the Permittee has submitted a timely, complete application (per 40 CFR §270.10 and applicable sections of §§270.14 through 270.29): a) to the West Virginia Division of Environmental Protection (DEP), OWM, and; b) through no fault of the Permittee, the Chief, has not issued a new permit, as set forth in 40 CFR §270.51.

F-4 Need to Halt or Reduce Activity Not a Defense (40 CFR §270.30(c))

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

F-5 Duty to Mitigate (40 CFR §270.30(d))

In the event of releases or noncompliance with the permit, the Permittee shall take all reasonable steps to minimize releases to the environment and shall carry out such measures as are reasonable to prevent significant adverse impact on human health or the environment.

F-6 Proper Operation and Maintenance (40 CFR §270.30(e))

The Permittee shall, at all times, properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality control/quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

F-7 Duty to Provide Information (40 CFR §§270.30(h) and 264.74)

The Permittee shall furnish to the Chief, within a reasonable time designated by the Chief, any relevant information which the Chief may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The Permittee shall also furnish to the Chief, OWM, upon request, copies of records required to be kept by this permit.

F-8 Inspection and Entry (40 CFR §270.30(l))

The Permittee shall allow the Chief, or an authorized representative, upon the presentation of credentials and other documents as may be required by law to:

a. Enter at reasonable times upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

d. Sample or monitor, at reasonable times, for the purposes of assuring permit compliance, or as otherwise authorized by the Act, any substances or parameters at any location. Split samples shall be provided if requested by the Permittee or an authorized representative.

F-9 Monitoring and Record keeping (40 CFR §§270.30(j), 264.73, and 264.74)

a. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

b. The Permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit and records of all data used to complete the application for this permit, for a period of at least three years from the date of the sample, measurement, report, certification, or application. This period may be extended, by request of the Chief, at any time.

c. The Permittee shall maintain records from all groundwater monitoring wells and associated groundwater surface elevations for the post-closure care period.

F-10 Reporting Planned Changes (40 CFR §270.30(l)(1))

The Permittee shall give notice to the Chief, as soon as possible, of any planned physical alterations or additions to the permitted facility.

Such notification does not waive the Permittee's duty to comply with the following: Pursuant to §22-18-8(a) of the West Virginia Code, no person may construct or modify any facility or site for the treatment, storage, or disposal of hazardous waste without first obtaining a permit. Permitting of these alterations or additions to the facility shall be in accordance with the procedures of 40 CFR §§270.41 or 270.42 that have been incorporated by reference into Section 11 of the HWMR.

F-11 Anticipated Noncompliance (40 CFR §270.30(l)(2))

The Permittee shall give advance notice to the Chief, of any planned changes in the permitted facility, or activity, which may result in noncompliance with permit requirements. Such notice does not constitute a waiver of the Permittee's duty to comply with permit requirements.

F-12 Transfer of Permits (40 CFR §§270.30(l)(3), 270.40(a), and 264.12(c))

This permit may be transferred by the Permittee to a new owner or operator only after providing notice to the Chief, and only if the permit is modified, or revoked and reissued, pursuant to 40 CFR §§270.40(b), 270.41(b)(2), or 270.42(a). Before transferring ownership or operation of the facility during its operating life, the Permittee shall notify the new owner or operator, in writing, of the requirements of 40 CFR Parts 264, 268, and 270 (including all applicable corrective action requirements), and shall provide a copy of the RCRA permit to the new owner or operator.

F-13 Compliance Schedule (40 CFR §270.30(l)(5))

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted to the Chief, no later than fourteen (14) days following each scheduled date.

F-14 Immediate Reporting (40 CFR, §264.56(d)(1) and (2)

Immediate Reporting of Emergencies to Local Authorities and the On-Scene Coordinator or the National Response Center.

(a) Pursuant to 40 CFR, §264.56(d)(1) and (2), if the facility's emergency coordinator determines that the facility has had a release, fire, or explosion, which could threaten human health or the environment, outside the facility, he/she must report his/her findings as follows:

(i) If his/her assessment indicates that evacuation of local areas may be advisable, he/she must immediately notify appropriate local authorities. He/she must be available to help appropriate officials decide whether local areas should be evacuated; and

(ii) He/she must immediately notify either the government official designated as the On-scene Coordinator for that geographical area, (in the applicable regional contingency plan under 40 CFR, Part 1510) or the National Response Center (1-800-424-8802).

(b) The report must include:

(i) Name and telephone number of the reporter;

(ii) Name, address, and telephone number of the facility;

(iii) Date, time and type of incident (e.g., release, fire);

(iv) Name and quantity of material(s) involved, to the extent known;

(v) The extent of injuries, if any; and

(vi) The possible hazards to human health or the environment, outside the facility.

F-15 Twenty-four (24) hour Reporting (40 CFR §§270.30(l)(6) and 270.33)

The Permittee shall report to the Chief, any noncompliance which may endanger human health or the environment. Any such information shall be reported orally within twenty-four (24) hours from the time the Permittee becomes aware of the circumstances.

This report shall include the following:

a. Information concerning the release of any hazardous waste which may endanger public drinking water supplies; and,

b. Information concerning the release or discharge of any hazardous waste, or of a fire or explosion at the facility, which could threaten the environment or human health outside the facility. The description of the occurrence and its cause shall include:

(i) Name, address, and telephone number of the owner or operator;

(ii) Name, address, and telephone number of the facility;

(iii) Date, time, and type of incident;

(iv) Name and quantity of material(s) involved;

(v) The extent of injuries, if any;

(vi) An assessment of actual or potential hazard(s) to the environment and human health outside the facility, where this is applicable, and;

(vii) Estimated quantity and disposition of recovered material that resulted from the incident.

A written submission shall also be provided to the Chief, within five (5) days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period(s) of noncompliance (including exact dates and times); steps taken to minimize impact on the environment; whether the noncompliance has been corrected, and if not, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate and prevent recurrence of the noncompliance. The Permittee need not comply with the five (5) day written notice requirement if the Chief, waives the requirement. Upon waiver of the five (5) day requirement, the Permittee shall submit a written report within fifteen (15) days of the time the Permittee becomes aware of the circumstances.

F-16 Other Noncompliance (40 CFR §270.30(l)(10))

The Permittee shall report all other instances of noncompliance not otherwise required to be reported above within fifteen (15) days of the Permittee becoming aware of the noncompliance. The reports shall contain the information listed in Condition I-F-15.

F-17 Submittal of Reports or Other Information (40 CFR §§270.30(l)(7), (8), (9), and 270.31)

All reports or other information required to be submitted pursuant to this permit shall be sent to:

Chief, Office of Waste Management
1356 Hansford Street
Charleston, WV 25301
ATTN: Hazardous Waste Management Section

I-G SIGNATORY REQUIREMENT

G-1 All reports or other information submitted to or requested by the Chief, his designee, or authorized representative, shall be signed and certified in accordance with 40 CFR §270.11.

G-2 Changes to Authorization. If an authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, or because a new individual or position has responsibility for the facility's compliance with environmental laws and permits, a new authorization satisfying the requirements shall be submitted to the Chief prior to or together with any reports, information, or applications to be signed by an authorized representative (40 CFR §270.11(c)).

I-H CONFIDENTIAL INFORMATION

In accordance with Section 11.7 of the HWMR, any information submitted to the Chief, Office of Waste Management, pursuant to this permit, may be claimed as confidential by the submitter. Any such claim must be asserted at the time of submission in the manner prescribed in Section 11.7.b and 11.7.c of the HWMR.

If no claim is made at the time of submission, the Office of Waste Management shall make the information available to the public. If a claim is asserted, the information shall be treated in accordance with the procedures in Section 11.7 of the HWMR.

I-I DOCUMENTS TO BE MAINTAINED AT THE FACILITY

The Permittee shall maintain and make available, at the facility, until the post-closure care period is completed and certified by an independent registered professional engineer, the following documents and all amendments, revisions, and modifications to these documents.

I-1 This permit with all attachments;

I-2 Operating Record, as required by 40 CFR §264.73, and this permit;

The following information must be recorded, as it becomes available, and maintained in the operating record until completion of the post-closure care period.

a. Summary reports and details of all incidents that require implementation of the contingency plan as specified in 40 CFR §264.56(j).

b. Records and results of inspections as required by 40 CFR §264.15(d) [this data needs to be kept for only three (3) years].

c. Monitoring, testing, or analytical data, and corrective action where required by 40 CFR §264, Subpart F.

d. All post-closure cost estimates under 40 CFR §264.144.

I-3 Corrective action reports and records, if any, must be maintained for at least three (3) years after all corrective action activities have been completed.

I-J DISCLOSURE IN DEED

Pursuant to Section 21 of the Act and Section 12 of the HWMR, the Permittee shall make a notation on the deed or lease to the facility property, or on some other instrument that is normally examined during the title search, that will, in perpetuity, notify any potential purchaser that the land has been used to manage hazardous waste. Such disclosure shall describe the location upon said property, identifying the type and quantity of hazardous waste and the method of storage, treatment, or disposal with respect to such waste.

MODULE II
GENERAL FACILITY CONDITIONS

II-A DESIGN AND OPERATION OF FACILITY

The Permittee shall design, construct, maintain, and operate the facility to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste and/or hazardous waste constituents to air, soil, or state waters (including surface and groundwater) which could threaten human health or the environment as required by 40 CFR §264.31.

II-B GENERAL SAMPLING AND ANALYTICAL REQUIREMENTS

B-1 The Permittee shall maintain calibrated functional instruments, verify the integrity of sampling and analysis by documentation, and perform correct calculations. Throughout all sampling and analytical activities, the Permittee shall use EPA approved procedures for sampling, sample chain-of-custody, analytical and quality assurance/quality control (QA/QC).

B-2 Documentation of monitoring information shall include:

a. The date, exact place, and time of sampling or measurement;
b. Names of company and individuals who performed the sampling or measurement;
c. Dates analyses were performed;
d. Names of laboratory and individuals who performed the analyses;
e. Analytical method used; and
f. Results of such analyses.

B-3 The Permittee shall record this data in the facility operating record as required by 40 CFR 264.73(b)(6) and permit condition I-I-2.c.

B-4 For purposes of demonstrating compliance with this permit and the Act, the Permittee shall not use laboratory data generated by a laboratory which is not certified under the West Virginia laboratory certification program as required by 22-1-15 of the W.Va. Code and Title 47, Series 32 Rule promulgated under this statutory provision.

II-C GENERAL INSPECTION REQUIREMENTS

C-1 The Permittee must inspect the facility for malfunctions and deterioration, operator errors, and discharges which may be causing or may lead to:

a. release of hazardous waste constituents to the environment;
or;
b. a threat to human health.

The Permittee must conduct these inspections often enough to identify problems in time to correct them before they harm human health or the environment (40 CFR §264.15(a)).

C-2 The Permittee must follow a written inspection schedule as outlined in Attachment 1.

C-3 The Permittee must remedy any deterioration or malfunction of equipment or structures discovered by an inspection as required by 40 CFR §264.15(c).

a. Where a hazard is imminent or has already occurred, the Permittee must take remedial action immediately.

b. The Permittee shall, within fifteen (15) days of an inspection, remedy any deterioration or malfunction of equipment or structure to ensure that the problem does not lead to an environmental or health hazard.

c. If the remedial action is expected to take more than fifteen (15) days, the Permittee shall, in addition to the immediate response specified in II-C-3a, submit a schedule for remedial action to the Chief for approval.

C-4 The Permittee shall record these inspections and their results in an inspection log (40 CFR 264.15(d), and the facility operating record as required by permit condition I-I-2.b.

II-D PERSONNEL TRAINING

The Permittee shall conduct personnel training as required by 40 CFR §264.16. The Permittee shall maintain training documents and records as required by 40 CFR §264.16.(d) and (e).

II-E PREPAREDNESS AND PREVENTION

E-1 Required Equipment

At a minimum, the Permittee shall equip the facility with the equipment as set forth in the contingency plan, Attachment 3, as required by 40 CFR §264.32.

E-2 Testing and Maintenance of Equipment

The Permittee shall test and maintain the equipment specified in the previous Permit Condition and in Attachment 3 as necessary to assure its proper operation in time of emergency as required by 40 CFR §264.33. The record of tests and maintenance shall be part of the facility operating record (40 CFR 264.73(b)(6)).

E-3 Access to Communications or Alarm System

The Permittee shall maintain access to the communications or alarm system as required by 40 CFR §264.32.

E-4 Required Aisle Space

At a minimum, the Permittee shall maintain aisle space as required by 40 CFR §264.35 to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment and decontamination equipment to any area of facility operation in an emergency.

II-F CONTINGENCY PLAN

F-1 Implementation of Plan

The Permittee shall immediately carry out the provisions of the approved contingency plan, as set forth in Attachment 3, and follow the emergency procedures described by 40 CFR §264.56 whenever there is an imminent or actual emergency situation (which includes release of hazardous waste or constituents, a fire, or explosion), which threatens or could threaten human health or the environment.

F-2 Copies of Plan

The Permittee shall comply with the requirements of 40 CFR §264.53 in regards to contingency plan distribution.

F-3 Amendments to Plan

The Permittee shall review and immediately amend, if necessary, the contingency plan, as required by 40 CFR §264.54.

F-4 Emergency Coordinator

Emergency Coordinators have been identified in the Contingency Plan (Attachment 3). Permittee shall comply with the requirements set forth in 40 CFR §264.55 and 264.56 regarding the emergency coordinator.

II-G GENERAL POST-CLOSURE REQUIREMENTS

G-1 Performance Standard

The Permittee shall perform post-closure care in a manner that controls, minimizes or eliminates, to the extent necessary, to protect human health and the environment, post-closure escape of hazardous constituent, leachate, contaminated run-off, or hazardous decomposition products to the waters of the State.

G-2 Amendment to Post-Closure Plan

The Permittee shall amend the Post-Closure Plan in accordance with 40 CFR §264.118(d) whenever necessary.

G-3 Certification of Completion of Post-Closure Care

Within sixty (60) days of completion of the established post-closure care period, Permittee must submit to the Chief, certification both by the Permittee and by an independent registered professional engineer, that the post-closure care has been performed in accordance with the specifications in the approved Post-Closure Plan and the terms and conditions of this permit as required by 40 CFR §264.120.

II-H COST ESTIMATE FOR POST-CLOSURE

H-1 Cost Estimates

a. Pursuant to 40 CFR §264.144, the Permittee shall have a detailed written estimate, in current dollars, of the cost of providing post-closure care in accordance with the approved post-closure plan, Attachment 5.

b. The estimate must be based on the costs to the owner or operator of hiring a third party to provide post-closure care. A third party is a party who is neither a parent nor a subsidiary of the owner or operator.

c. The post-closure cost estimate is calculated by multiplying the annual post-closure cost estimate by the number of years of post-closure care required under permit condition III-B-1.

H-2 Annual Adjustment (§264.144(b))

During the active life of the facility, the Permittee must adjust the cost estimate for inflation within sixty (60) days prior to the anniversary date of the establishment of the financial instrument used to comply with the requirements of 264.145. If using the financial test or corporate guarantee, the cost estimate must be updated for inflation within thirty (30) days after the close of the firm's fiscal year and before submission of updated information to DEP.

H-3 Adjustment for Changed Conditions

The Permittee must revise the cost estimate whenever there is a change in the facility's post-closure plan as required by 264.144(c).

H-4 Availability

The Permittee must keep at the facility the latest cost estimate as required by 264.144(d).

II-I INCAPACITY OF OWNER/OPERATORS, GUARANTORS, OR FINANCIAL INSTITUTIONS

The Permittee must notify the Director, Division of Environmental Protection, by certified mail, of the commencement of a voluntary or involuntary proceeding under Title 11 (Bankruptcy), U.S. Code, naming the Permittee as debtor, within ten (10) days after commencement of the proceeding, as required by 40 CFR §264.148.

II-J FINANCIAL ASSURANCE REQUIREMENTS

The Permittee shall maintain compliance with 40 CFR §264, Subpart H by providing financial assurance, as required by 40 CFR §264, Subpart H, in at least the amount of the cost estimate required by Permit Condition II-H.

II-K LIABILITY REQUIREMENTS

The Permittee shall comply with the requirements of 40 CFR §264.147 and the documentation requirements of 40 CFR §264.147, including the requirements to have and maintain liability coverage for non-sudden accidental occurrences in the amount of at least $3 million per occurrence with an annual aggregate of at least $6 million, exclusive of legal defense costs.

II-L SECURITY

The Permittee shall comply with the security provisions of 40 CFR §264.14.

II-M REQUIRED NOTICES

The Permittee shall comply with the requirements of 40 CFR §264.12(c) and 264.119.

II-N CONSIDERATIONS UNDER STATE LAW

N-1 Groundwater Protection Act

The Director, Division of Environmental Protection, under the provisions of the Groundwater Protection Act (Article 12, Chapter 22 of the West Virginia Code), has certified the groundwater regulatory program of the Office of Waste Management (OWM), Hazardous Waste Management, and thereby authorized OWM to be a groundwater regulatory agency for the purposes of Article 12.

a. Annual Fee

The Permittee shall pay the annual groundwater protection fund fee in accordance with the rules codified as Title 47, Series 55, that were promulgated under the Groundwater Protection Act. Pursuant to Section 9(a) of this Act, failure to remit groundwater protection fund fees may result in withdrawal or withholding of groundwater certification and, subject the Permittee to the penalties outlined in West Virginia Code §22-12-10.

b. Groundwater Protection Plan

The rules, Title 47, Series 58, promulgated under the Groundwater Protection Act, establish a series of practices which must be followed by persons subject to regulation by OWM under the Groundwater Protection Act. Pursuant to Section 4.12.3 of 47 CSR 58, the Groundwater Protection Plan (GPP) must be available on site at all times.

MODULE III
POST-CLOSURE CARE

III-A AREA IDENTIFICATION

The area of the facility east of the terminal building and bordering W.Va. State Route 25, as depicted in Attachment 5, subject to post-closure care, is composed of the following three subsets:

A-1 Buried drum excavation area of approximately 0.10 acres where almost 9000 gallons of waste originating from tanker truck residuals was released prior to and during the drum excavation and which an undetermined amount of hazardous constituents escaping the excavation were released to the soils and may have subsequently reached groundwater. The depth of these excavations may have approached groundwater. These excavations were backfilled with clean soil taken from the hillside.

A-2 Bio-remediation area of approximately 0.56 acres where undetermined amounts of hazardous constituents were released to the environment over a two years duration from the eight (8) bio-remediation cells.

A-3 The far easterly portion of the permitted area consisting of approximately 0.11 acres where approximately 2200 cubic yards of the treated soils meeting the land disposal restrictions of 40 CFR 268 have been stock piled on a plastic liner. The stock pile has been seeded to reduce erosion and a silt fence has been placed around the stock pile to control run-off. Based on an OWM site survey for permitting purposes and the initial permit application submittal, the treated soil stock pile has little or no provision to control run-on from the hillside. The permit addresses this inadequacy in Permit Condition III-C.

III-B POST-CLOSURE CARE PERIOD

B-1 In accordance with 40 CFR 264.117(a)(1), the post-closure care period will continue for thirty (30) years after the date of completion of closure and shall consist of the following;

(a) Monitoring and reporting in accordance with this permit, and

(b) Inspection and maintenance of monitoring wells and waste containment systems in accordance with this permit.

B-2 In accordance with 40 CFR 264.117(a)(2), the Chief may, pursuant to the permit modification procedures in Section 11 of HWMR and 40 CFR 270;

(a) Shorten the post-closure care period if he/she finds that the reduced period is sufficient to protect human health and the environment, or

(b) Extend the post-closure care period if he/she finds that the extended period is necessary to protect human health and the environment.

III-C SCHEDULE OF COMPLIANCE

C-1 Within ninety (90) days following the issuance date of this permit, the Permittee shall have installed the controls to minimize the run-on to the treated soil stock pile area which are described in Attachment 5.

C-2 Certification of Compliance: No later than fourteen (14) days following the compliance date set forth in III-C-1, the Permittee shall notify the Chief, by certified mail, or hand delivery, in a letter signed by the Permittee and a registered professional engineer that the run-on control was installed in compliance with this permit.

III-D INSPECTIONS

The Permittee shall inspect the components, structures, and equipment at the site at least monthly in accordance with Attachment 1.

III-E POST-CLOSURE PROCEDURES

E-1 The Permittee shall maintain the groundwater monitoring system in accordance with this permit.

E-2 The Permittee shall maintain a vegetative cover over the area of stockpiled treated soil.

E-3 The Permittee shall construct, operate, and maintain the run-on control system for the stock pile area to adequately divert stormwater from hillside running on to stockpile from at least a 25-year storm.

E-4 The Permittee shall maintain the run-off control system of the stockpile area.

III-F POST-CLOSURE PERMIT MODIFICATIONS

The Permittee must request a permit modification to authorize a change in the approved Post-Closure Plan. This request must be in accordance with the applicable requirements of 40 CFR 270, and must include a copy of the proposed amended Post-Closure Plan for approval by the Chief.

The Permittee shall request a permit modification whenever changes in operating plans or facility design affect the approved Post-Closure Plan, or other events occur during the active life of the facility that affect the approved plan. The Permittee must submit a written request for a permit modification at least sixty (60) days prior to the proposed change in facility design or operation, or no later than sixty (60) days after an unexpected event has occurred which has affected the Post-Closure Plan (40 CFR 264.118(d)).

MODULE IV
GROUNDWATER MONITORING

IV-A AREA IDENTIFICATION

The groundwater beneath the area to the east of the terminal building and bordering State Route 25 may have been effected by the releases of hazardous constituents originating from pre-RCRA waste disposal and RCRA remedial activities conducted at the site. A map depicting the suspect area and the proposed monitoring well locations can be found in Attachment 4.

IV-B SCHEDULES OF COMPLIANCE (40 CFR 270.33)

B-1 Groundwater Monitoring Well Installation:

Within ninety (90) days following the issuance date of this permit, the Permittee shall have installed the six (6) groundwater monitoring wells in accordance with the specification contained in this permit.

B-2 Certification of Compliance:

No later than fourteen (14) days following the compliance date set forth in IV-B-1, the Permittee shall notify the Chief, by certified mail, or hand delivery in a letter signed by the Permittee and a registered professional engineer that the five monitoring wells were installed in compliance with this permit.

B-3 Corrective Action (Contingent):

In accordance with 40 CFR 264.99(h), if the evaluation under Permit Condition IV-C-4-d, triggers the need for corrective action, the Permittee shall, within one-hundred eighty (180) days, submit to the Chief, an application for a permit modification to establish a corrective action program meeting the criteria of 40 CFR 264.100.

IV-C MONITORING REQUIREMENTS

C-1 Points of Compliance and Compliance Period

a. Monitoring wells MW-102 through MW-106 shall serve as the downgradient compliance points for the waste management area. The upgradient monitoring well MW-101 shall serve as background.

b. Pursuant to 40 CFR 264.96 the compliance period shall last until September, 2004. If the Permittee is required to perform further remedial activities the compliance period will last through the corrective action period and extend until the Permittee can demonstrate that the groundwater

protection standard expressed in permit condition IV-C-2 has not been exceeded for a period of three (3) consecutive years.

C-2 Groundwater Protection Standard

The Permittee shall monitor groundwater for the indicator parameters conductivity, pH and TOC and to determine whether the waste management area is in compliance with the following groundwater protection standards which have been listed in Appendix A of Title 46, Series 12, of the State Rules promulgated under the Groundwater Protection Act.

CONSTITUENT	MAXIMUM CONCENTRATION (IN MICROGRAM PER LITER)
METALS	
Lead (total)	15
ORGANICS	
Benzene	5
Carbon tetrachloride	5
Chlorobenzene	100
Dichlorobenzene-para	75
Dichlorobenzene-Ortho and/or meta	600
1-2 Dichloroethane	5
1-1 Dichloroethylene	7
Methlene Chloride	5
Bis [2-ethylhexyl] phthalate (DEHP)	6
Ethylbenzene	700
Styrene	100
Tetrachlorethylene	5
Trichlorobenzene	70
1-1-1 Trichloroethane	200
1-1-2 Trichloroethane	5
Trichloroethylene	5
Vinyl Chloride	2

C-3 Monitoring Program Procedures

a. The Permittee shall comply with the procedures contained in 47 CSR 60 for monitoring well installation and closing.

b. The Permittee shall comply with the procedures contained in Attachment 4 for: 1) determining groundwater elevations, 2) sampling, 3) sample preservation, 4) sample chain-of-custody, 5) analysis, 6) quality assurance/quality control (QA/QC), and 7) data evaluation.

c. For those analytical parameters not covered in the permit application and Attachment 4 (Pb, TOC, etc.) the Permittee shall use EPA approved methods for sample preservation and analysis.

C-4 Monitoring Program Evaluations

The Permittee shall determine groundwater quality as follows:

a. Quarterly, for the first six (6) consecutive quarters, the Permittee shall determine groundwater elevations at each sampling event and collect, preserve and analyze **duplicate** groundwater samples from the monitoring wells specified in permit condition IV-C-1a for the indicator parameters and constituents specified in IV-C-2 in accordance with the procedures specified in IV-C-3.

b. After obtaining the initial database under permit condition IV-C-4a, the Permittee shall determine groundwater quality on a **semi-annual** frequency. Duplicate samples from each monitoring well shall be taken for indicator parameters specified in IV-C-2. Single samples from each well shall be taken for constituents specified in IV-C-2 with one (1) field blank and one (1) blind duplicate per sampling event as per Attachment 4.

c. To assure sample integrity and defensible data, the Permittee shall document sample chain-of-custody from initial sampling to the final laboratory determination.

d. Annually, the Permittee shall apply statistical tests to the data using the Parametric Analysis of Variance as per Attachment 4.

   i. Pursuant to 40 CFR 264.98(g)(2), if the statistical tests applied to the monitoring well data indicate that a significant increase (or decrease in case of pH) of any indicator parameter or constituent or any constituent exceeding the maximum concentration allowed in Permit Condition IV-C-2 has occurred, the Permittee shall immediately sample and analyze for the list of constituents in

Appendix IX of 40 CFR 264. (in accordance with Section 7.5.c.1 of HWMR, this sampling and analysis for the constituents of Appendix IX need only be repeated once in every five (5) years) and;

ii. Pursuant to 40 CFR 264.99(h), Within one-hundred eighty (180) days, the Permittee shall submit, to the Chief, an application for a permit modification to establish a corrective action program meeting the criteria of 40 CFR 264.100.

IV-D REPORTING AND RECORD KEEPING REQUIREMENTS

D-1 The Permittee shall enter all monitoring, testing, analytical, and statistical data obtained, pursuant to Permit Condition C-4a, b, c, and d, into the Operating Record.

D-2 Quarterly, for the first six (6) consecutive quarters, the Permittee shall submit a report to the Chief, on the results obtained pursuant to Permit Condition C-4a and c in accordance with the schedule in Permit Condition IV-D-5.

D-3 After obtaining the initial database during the first six (6) consecutive quarters, the Permittee, on a semi-annual frequency, shall submit a report to the Chief, on the results obtained pursuant to Permit Condition IV-C-4b and c in accordance with the schedule specified in Permit Condition IV-D-5.

D-4 Annually, the Permittee shall submit a report, to the Chief, on the results obtained pursuant to Permit Condition IV-C-4b, c, and d, in accordance with the schedule in Permit Condition IV-D-5.

D-5

SAMPLING PERIOD	*REPORT DUE DATE*
First Quarter	May 15
Semi-Annual or Second Quarter	August 15
Third Quarter	November 15
Annual or Fourth Quarter	February 15

LIST OF PERMIT ATTACHMENTS

The following material has been compiled from the Permittee's permit application and is part of this permit:

Attachment 1:	Inspection Schedule
Attachment 2:	Training Outline
Attachment 3:	Contingency Plan
Attachment 4:	Groundwater Monitoring
Attachment 5:	Post-Closure Plan